BOUSTON PURE DELIBIORIE BOUSTON, TEXAS

September, 1953

SOAP and Sanitary Chemicals

In this issue ...

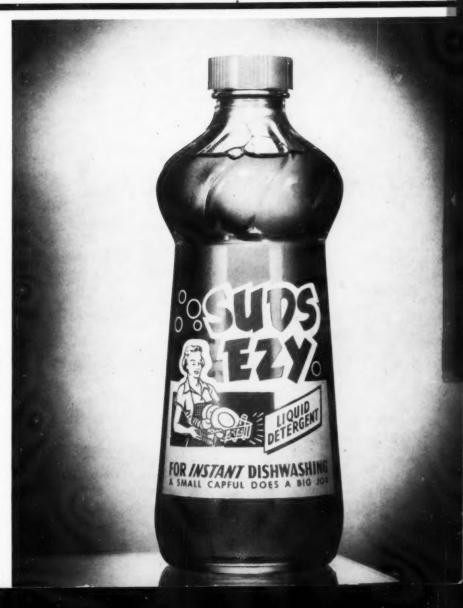
Who buys how much shampoo, for what price, and where?

Catalog is a best seller for sanitary supply firm

Radioactive tracers' role in insecticide resistance

Vestal, Inc., completes 40 years making specialties

Cover photo . . . Tennessee Soap Co. jumps into the fight for a share of the household liquid detergent market with its new entry, "Suds Ezy." Twelve-ounce, handy grip bottle with applied color label by Owens-Illinois Glass Co., who also supplies the plastic closure.





The D&O Product
Development Laboratories
present DIPAROMES...
a newly developed
fragrance group designed
to mask the unpleasant
odors associated with
Dip-Silver instant cleansers.

Let us test your Dip-Silver product with DIPAROME ROSE. Send us an unscented sample for individual testing in our laboratories.



Our 155th Year of Service



DODGE & OLCOTT, INC.

180 Variok Street . New York 14, N. Y. SALES OFFICES IN PRINCIPAL CITIES

ESSENTIAL OILS . AROMATIC CHEMICALS . PERFUME BASES . VANILLA . FLAVOR BASES

IF YOU SELL WAX AT A PROFIT

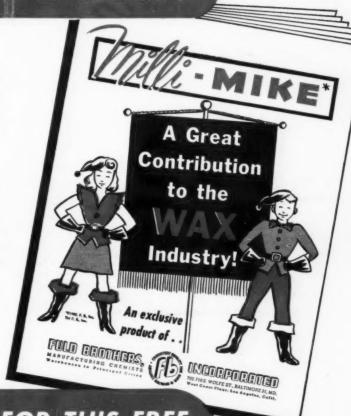
THIS IS A MUST!

This 8-page booklet gives you the reasons why you can sell Premium Guaranteed Quality MILLI-MIKE for \$3.00 to \$4.00 a gallon . . . yet buy it under your private label at a medium wax price.

MILLI-MIKE Sales are Booming!

MILLI-MIKE has been on the market long enough to stand up under the test of time. A great sales success, MILLI-MIKE paints its own profit picture everywhere introduced.

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WRITE TODAY FOR THIS FREE EIGHT-PAGE BOOKLET!

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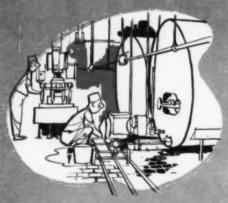
FULD BROTHERS,

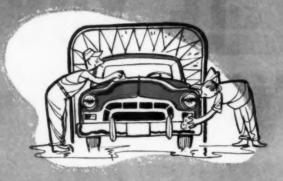
MANUFACTURING CHEMISTS



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702-710 S. WOLFE ST., BALTIMORE 31, MD. West Coast Plant: Los Angeles, Calif.





clean up with...





Monsanto's NEW STEROX AJ

Here's an opportunity for formulators to increase profits — Sterox AJ!

Useful in scores of industrial applications, Monsanto's new Sterox AJ is already a favorite because of its unusually high stability in acid and alkaline media and its faint pleasing odor.

Sterox AJ is extremely useful in liquid detergents, sanitizer formulations, metal cleaning compounds and all types of industrial and household cleaning compounds. Some of its advantages are:

- Effective over a wide range of concentrations and temperatures.
- · Unaffected by hard water conditions.
- Excellent detergent for fats and oils as well as carbonaceous soils.

- Compatible with anionic or cationic agents and may be used in combination with soaps and sanitizers.
- Unusually high wetting power, emulsifying properties and surface activity.

For complete details on this modern wetting agent write for bulletin P-147 to MONSANTO CHEMICAL COMPANY, Phosphate Division, 1700 South Second Street, St. Louis 4, Missouri.

Sterox: Reg. U.S. Pat. Off.

DISTRICT SALMS OFFICES: Birmingham, Boston, Charlotte, Chicago, Cincinnati, Cleveland, Detroit, Los Angeles, New York, Philadelphia, Portland, Ore., San Francisco, Seattle. In Canada, Monsanto Canada Limited, Montreal.



SERVING INDUSTRY . . . WHICH SERVES MANKING

SOAP and Sanitary

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IRA P. MAC NAIR President

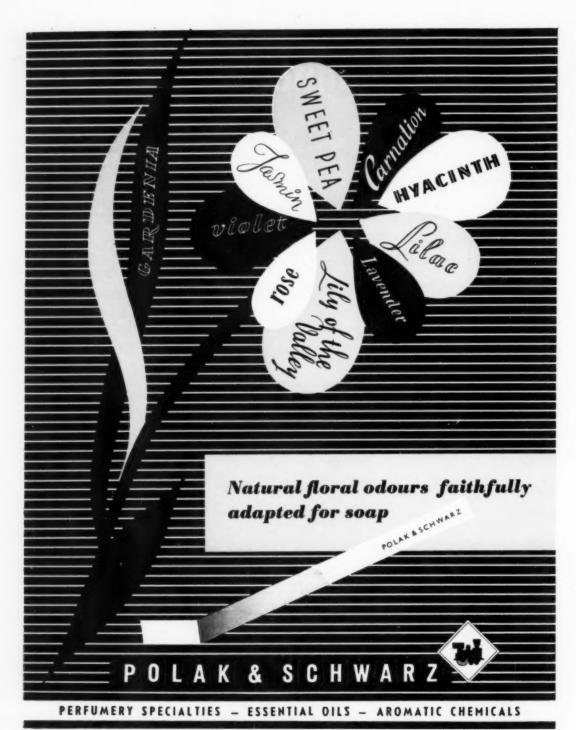
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Polak & Schwarz Inc., 667 Washington Street, New York 14 (N.Y.)

Tops all previous Hysan successes!



revolutionary new sudsing, white emulsion

DISINFECTING BOWL SANITIZER

Hottest self-demonstrating repeat seller in sanitation history.

Disinfects • de-scales • deodorizes • cleans bowls and urinals by instant chemical action.

You don't need a technical salesman to sell ZAX. One rabbit-quick demonstration makes the sale, and every open door is a prospect.

No other bowl cleaner does—and proves—what ZAX does. That's why thousands more are switching to ZAX every day. If you are prepared to take one of the hottest repeat sellers in the sanitation business and do a job with it, we'd like to hear from you.

♦ GOOD TERRITORY AVAILABLE. SEND FOR DETAILS.



MIRROR TEST CLINCHES SALE!

Your salesman places the mirror side at a ZAX DEMONSTRATOR CARD underneath the toilet flush ring.
Mirror shows prospective buyer the crust that's hidden below ring. "This disease-spreading crust is the source of your toilet room odors. Watch ZAX remove it." Salesman strakes this crust with a ZAX-sprinkled mop (supplied with Zax) and again places mirror below flush ring. The crust, odor and sales resistance have vanished.



EYE CATCHER!

New bright fired-on ceramic labels . . . can't scratch off, wash off, or soil on shelves.

NEW PROFIT OPPORTUNITIES

Hysan gives you one hot item after another. New promotions—with all the trimmings—new peak profit opportunities...GO HYSAN AND GO PLACES—FASTER!

Products Company, 932 West 38th Place, Chicago 9, Ilfinois



No one likes to sleep with a clothespin on his nose. That's why it was important to avoid odor and yellowing of foam rubber. In this particular case it was easy. Replacing an ordinary double-distilled oleic acid with Emersol 233LL Elaine, eliminated odor due to rancidity. Likewise, the superior color stability of 233 gave the product maximum resistance to yellowing.

In addition, its low metal content resulted in highest service life, avoiding the acceleration of resinification of the rubber caused by minute traces of metallic impurities.

Whatever you make, foam rubber or an entirely unrelated product, the superior color stability, oxidation stability, and resistance to rancidity of all Emersol Oleic Acids can make your product better, stay better longer. The net result: your product will have consumer appeal... be easy to sell. And since they cost no more than competitive grades, next time...everytime...it will pay you to buy Emersol Elaines!

What Does Emersol Mean? Emersol, a contraction of the words "Emery" and "Solvent", describes Emery's exclusive process of solvent separation of fatty acids. Of more significance, however, is its meaning in terms of product performance. Because of this unique process, the use of automatic controls and of corrosion resistant metals throughout, Emersol Stearic and Oleic Acids are purer, more uniform, of "controlled" composition, and freer from metal contamination and other impurities that promote oxidation, rancidity and yellowing.

Because all these advantages carry over into your finished products, to you, Emersol actually means better products...products that stay better longer... products that are easier to sell.



Fatty Acids & Derivatives Plastolein Plasticizers

Emery Industries, Inc., Carew Tower, Cincinnati 2, Ohio

Twitchell Oils, Emulsifiers

Export: 5035 RCA Bldg., New York 20, New York Schibley & Ossmann, Inc., Cleveland . Ecclestone Chemical Co., Detroit

se stocks also in St. Louis, Buffalo, Baltimore and Los Angeles

THE TETRINES

To Sequester Trace Metals

Use in the Compounding of

Soaps
Shampoos
Synthetic Detergents
Toiletries
Cosmetics
Disinfectants
Insecticides
Laundry Formulations

The Tetrines

Tetrine Acid
(99%+Active)
Tetrasodium Tetrine
Tetrasodium Tetrine 50
Tetrasodium Tetrine 25
Sodium Tetrine Liquid
(26% Active)
Sodium Tetrine
Liquid Conc.
(39% Active)
Trisodium Tetrine
Disodium Tetrine

ow Glyco is producing the Tetrines (ethylene diamine tetraacetic acid and salts) at its new plant at Williamsport, Pa.

Containing the most modern equipment, this up-to-date plant is geared to supply your growing requirements for metallic ion sequestering agents.

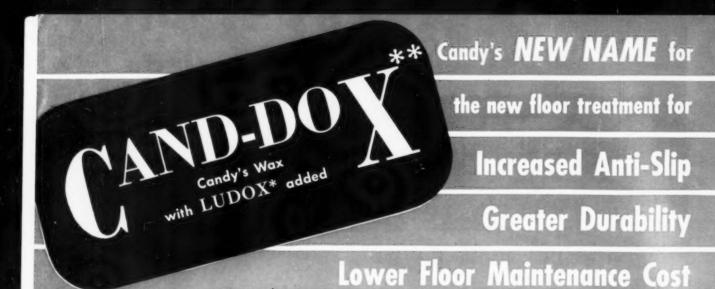
Trace metal contaminants create processing difficulties and/or product impairment in every industry using process water. The ability of the Tetrines to chelate, or sequester, or complex di- and tri-valent metallic ions results in excellent control of contaminants in the compounding operations listed here. The Tetrines are stable to storage and to all temperatures and pH's encountered in these operations — effective in high concentrations and extreme dilutions of metallic ions.

Your inquiries for further information will receive our prompt and complete attention.

GLYCO



Products Co., Inc., 26 Court Street, Brooklyn 1, N. Y.





CAND-DOX #cs

Originally offered as CANDY'S SUPREME Special WR-AS in July 1950

CAND-DOX #BB

Originally offered as BRIGHT BEAUTY Special WR-AS in June 1951 CAND-DOX #CS and BB are made in any total percentage of solids 8% to 18% and in 24% concentrate.

CAND-DOX #CS is slighty more durable and higher priced than CAND-DOX #BB in like percentage of total solids.

floor treatments represent the finest products available where a higher than minimum recognized standard of anti-slip quality is desired. The resultant films from the use of these products are HARD, non-tacky, and will withstand wear, dirt and discoloring traffic marks.

DURABILITY and ANTI-SLIP... (AND-DOX products include a compensating factor—LUDOX*—in itself harder than wax. The addition of LUDOX* to the proper wax bases, perfected purposely to accommodate this additive, causes a greater coefficient of friction and therefore greater safety underfoot.

WATER RESISTANCE and REMOVABILITY in proper balance are very important in every maintenance program. In the development of the wax emulsion bases that go into (AND-DOX) floor treatments, the important all-around high qualities of our (Standard) CANDY'S SUPREME, BRIGHT BEAUTY and other well known and accepted waxes were taken into consideration and accomplished in the final (AND-DOX) products containing the new bases plus additive.

BEAUTY of floors maintained with (AND-DOX floor treatments, which are both hard and very anti-slip, is no less than remarkable and equal to the lustre for which our products have long been famed. The same buffing can be applied, if desired, and the same gloss will result.

Our policy in regard to use of new additives to our floor waxes has always been clear-cut...if a definite improvement can be accomplished we endeavor to formulate and combine new ingredients in such a way as to conform to our very high standards of product function. These standards in no case are ever sacrificed to climb on any "bandwagon" of sales appeal.

The laboratory work in ours or any organization is very important and the starting point for research and development of new useful products. However, FIELD TESTING is the real proof of the real value of any floor treatment. (AND-DOX floor treatments have been thoroughly field tested and are now being sold in quantity by many of our distributors, with success—again proving merit in FIELD USE.

** (AND-DOX contains CANDY'S wax emulsion with LUDOX* added in such proportion as to fully deliver the usefulness of this additive to floor wax. *Trademark of E. I. du Pont de Nemours & Co., (Inc.) Reg. U. S. Pat. Off.

CAND-DOX is available for private brand resale and is sold only through distributors except for experimental accounts in Chicago essential to research.

Why not write us today for free samples and prices so that you can make your own FIELD TESTS?

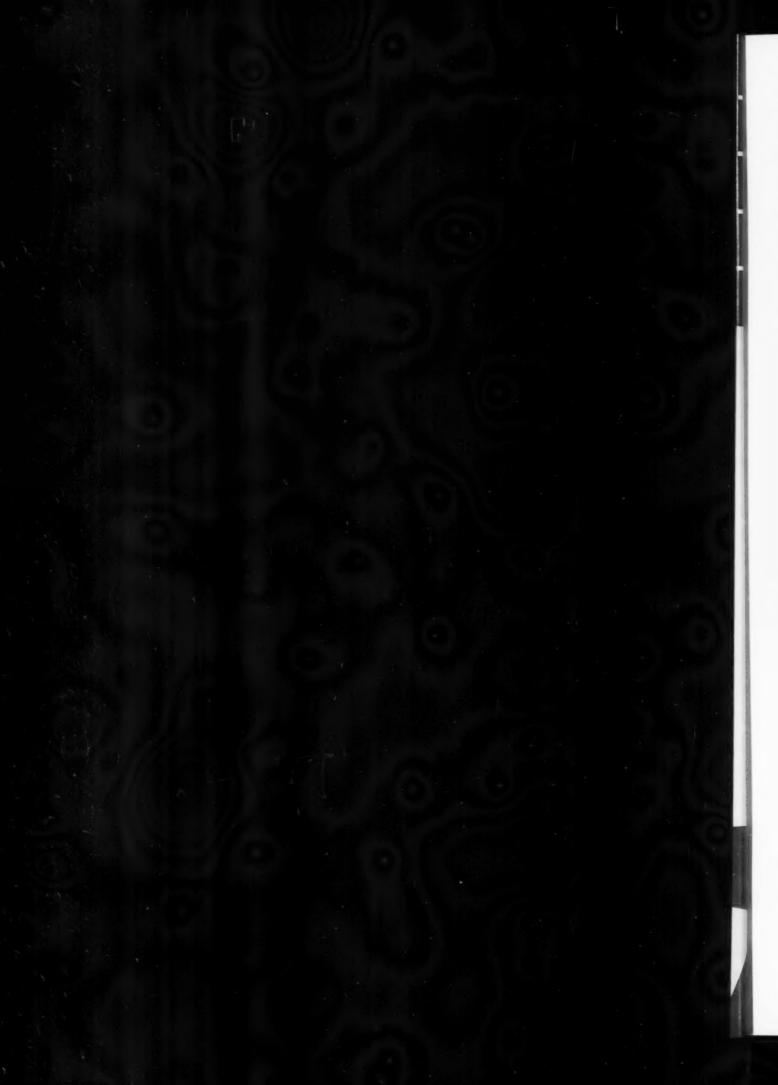
The most complete line of water emulsion waxes of the highest quality available anywhere

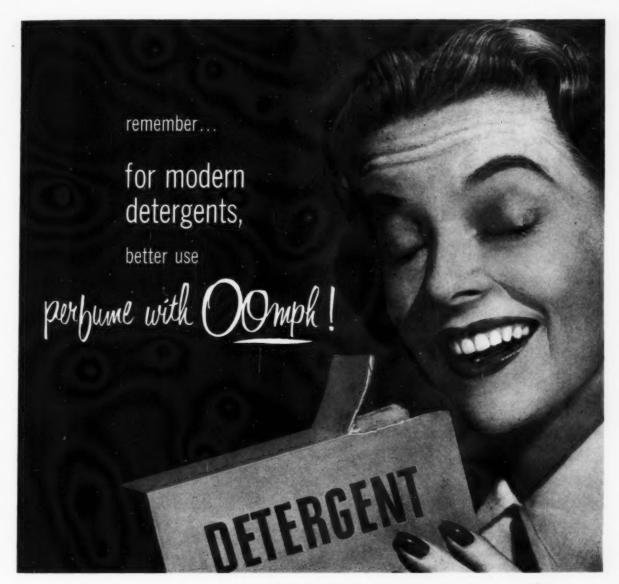
CANDY'S SUPREME (Standard)
CANDY'S SUPREME Special WR
CANDY'S DELUXE
BRIGHT BEAUTY (Standard)
CANDY'S #640
#CS (AND-DOX
#BB (AND-DOX

All the above CANDY products are listed by Underwriters' Laboratories as "anti-slip floor treatment materials." Candy & Company, Inc.

2515 W. 35th St., CHICAGO







Modern detergents present special scenting problems which have received careful technical attention from Felton Chemists.

Using ordinary oils to perfume a detergent is like sending a boy to do a man's job. As a result of applied research and innumerable tests with every type of detergent, Felton is able to offer the manufacturer highly dependable perfume oils that simply won't whiten-out.



PLANTS: Brooklyn, N.Y. * Los Angeles, Cal. * Montreal, Que. * Versailles (S&O) France
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St. Louis * Toronto
Stocks Carried in Principal Cities

Felton Vetergent Perfumes have what it takes!

Tell us about your detergent product and its use; we will be very glad to send you suitable perfume samples.

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Position		***************************************	257-Mart 4 - 101 (1922-1977 1922-1977	
Firm Name		***************************************	***************************************	
Address	***************************************		***************************************	
City		oneStat		

Now! An even BETTER D-40

by the world's largest producer of synthetic detergent raw materials



Oronite, a pioneer and major producer of detergent raw materials, again leads the way with superior products. Compare improved D-40 for characteristics and performance—you'll agree there just isn't a better all-around product for repackaging or compounding. Our higher active

product D-60 is also better than ever.

Compounders of cleansers, bubble bath, laundry, dishwashing and car washing products will find D-40 produces better quality, more competitive branded products. Write the nearest Oronite office for complete information and product samples.

BETTER Odor...Extremely bland—almost odorless

BETTER COLOR...

A whiter white color

BETTER Caking Resistance... Flows more freely

BETTER Foam Stability...Greater resistance to de-foaming in presence of

grease BETTER Detergency...improved action on cotton and wool

D-40 is available in 3 particle sizes: D-40SF (Flakes) D-40 (Granules) D-40FG (Powder)

ORONITE CHEMICAL COMPANY

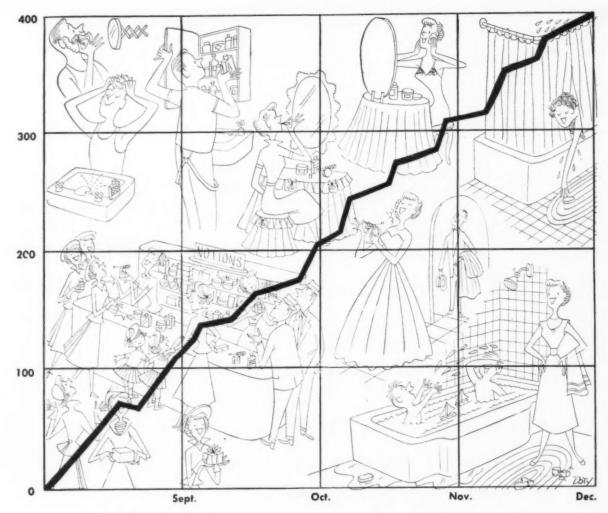
38 SANSOME ST., SAN FRANCISCO 4, CALIF. 30 ROCKEFELLER PLAZA, NEW YORK 20, N.Y.

FRANCISCO 4, CALIF. STANDARD OIL BLDG., LOS ANGELES 15, CALIF.

A, NEW YORK 20, N.Y. 600 S. MICHIGAN AVENUE, CHICAGO 5, ILL.

MERCANTILE SECURITIES BLDG., DALLAS 1, TEXAS

2632



ccess

BECAUSE... The ultimate test of a product's "rightness" is its wide and enthusiastic consumer acceptance. Cosmetic and toiletry products using VERONA fragrances meet this test daily on the retail firing line . . . toiletries which are quality products through and through . . . market leaders.

> Because . . . VERONA has concentrated the efforts of its research and development staff on the problems of helping the market leaders capture and hold consumer preference-by constantly developing formulae that bring out the full fragrance potential of their products.

Try these specialties in your present oils and note the marked improvement:

- Is your fragrance floral? You can heighten its impact with the greater floralcy imparted by CUMIN KETONE. Try adding 1/4 to 1/2% to your present floral fragrance.
- · Want that cleaner, fresher fragrance? Add up to 5% CYCLAMAL.
- Striving for that exciting high aldehydic topnote? You'll get it with ½ to ¾% ALDINE VERONA.
- Want to make your Lily and Lilac scents come thrillingly alive? Add 1/2 to 3/4 % Verona RESEDALIA.



PRODUCTS TO BUILD SALES FOR YOUT PRODUCTS

26 Verona Avenue, Newark, N. J.

AROMATICS DIVISION VERONA CHEMICAL COMPANY

208 North Wells Street, Chicago, Ill.

Important news for



Shell Chemical—
long a major supplier
of high-quality industrial alcohol—
can now deliver any quantity...
all major formulations...FAST

As the need for dependable petroleum-derived ethyl alcohol has become more and more urgent, Shell Chemical has expanded its distribution facilities

Now, complete denaturing plants have been established in three key industrial centers, ready to make the fastest possible delivery to you in any quantity you may need . . . in drums, tank trucks, compartment trucks, tank cars or compartment tank cars.*

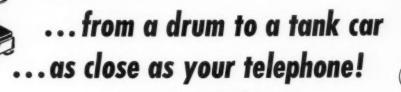
High purity... dependable supply Shell Chemical's ethyl alcohol is of the highest quality, meeting or surpassing all Federal and commercial specifications for purity. It is available as pure alcohol (190 proof), in specially and completely denatured grades, and as the two proprietary solvents, Neosol® and Neosol A.

Your Shell Chemical representative will be glad to discuss your alcohol supply problem with you, at your convenience. You are invited to telephone or write.

 Tank truck and drum availability west of Rocky Mountains is limited

every user of...

ALCOHOL



Why Shell Chemical is your best source of ethyl alcohol—

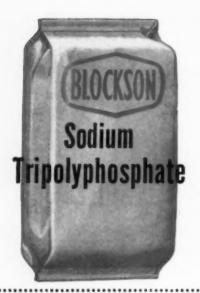
- You get extremely pure, high-quality ethyl alcohol.
- 2. Supply is dependable because ethyl alcohol is derived from domestic petroleum raw materials.
- **3.** Fast delivery is assured because of denaturing facilities in key locations.
- 4. Worth-while savings result from multi-solvent shipping in compartment trucks or tank cars. You can get your other Shell Chemical solvents delivered along with alcohol at bulk chemical rates.

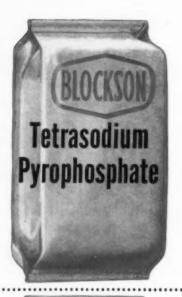
SHELL CHEMICAL CORPORATION

CHEMICAL PARTNER OF INDUSTRY AND AGRICULTURE

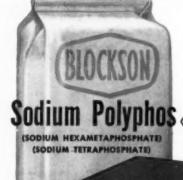
Eastern Division: 300 Fifth Avenue, New York 36 • Western Division: 100 Bush Street, San Francisco 6 Atlanta • Boston • Chicago • Cleveland • Detroit • Houston • Los Angeles • Newark • St. Louis In Canada: Chemical Division, Shell Oil Company of Canada, Limited • Toronto • Montreal • Vancouver











Sodium Polyphos is Blockson's brand name for a water soluble Glassy Sodium Phosphate with the desirable characteristics of Sodium Hexametaphosphate and Sodium Tetraphosphate.

ALSO MAJOR PRODUCERS OF:

SODIUM ACID PYROPHOSPHATE

CHLORINATED TRISODIUM PHOSPHATE

DISODIUM PHOSPHATE

ANHYDROUS . CRYSTALLINE

MONOSODIUM PHOSPHATE

ANHYDROUS . MONOHYDRATE

SODIUM FLUORIDE

SODIUM SILICOFLUORIDE

HYGRADE FERTILIZER



BLOCKSON CHEMICAL COMPANY Joliet, Illinois Grease, soot, drinks,

food, wax ...



All disappear when you clean the modern way with Washburn <u>deep</u> tone cleaner

Deep Tone is the miracle cleaner that you have been hearing about. It is effective and harmless on all types of floors, walls, woodwork, furniture and fixtures. It is the cleaner that destroys odors.

Deep Tone is easy to use. It cleans quickly and is economical to use. Floors cleaned with Deep Tone wash bright and stay bright.

No rubbing, no scrubbing when you use Deep Tone cleaner.

- 1) SPREAD THE SURFACE . . .
- 2) ALLOW TO SET . . .
- 3) PICKUP ...

and the job is done thoroughly.



REGIONAL WAREHOUSES IN:

Los Angeles • San Francisco • Denver • Seattle • Atlanta • Dallas

T.F. WASHBURN COMPANY

10 SUPERIOR SULFRAMIN' FORMULATIONS TO MEET YOUR EXACT PROCESSING REQUIREMENTS

TRY ULTRA'S ALKYL ARYL SULFONATES UNDER OPERATING CONDITIONS IN YOUR PLANT

SULFRAMIN' AB-40 FLAKES

Excellent foam stability, especially at high pH. Very low in dust and odor. Outstanding wetting.

SULFRAMIN* AB-40 BEADS

A neutral synthetic organic detergent, wetting and emulsifying agent of the sodium alkyl aryl sulfonate 40% active type.

SULFRAMIN* HD BEADS

An alkyl aryl sulfonate in spray dried form blended with complex phosphates and organic chemicals for HIGH DETERGENT value.

SULFRAMIN* L

This new, chemically different synthetic, in gel form, offers unusual foam stability and excellent detergency.

SULFRAMIN* AB-CONCENTRATE FLAKES

80-85% active organic material. For blending where high active is required in finished product. Density, 3.

SULFRAMIN* KE LIQUID

Clear amber liquid. 25% active 3% sulfate. Excellent for compounding. Can be tailored to meet your requirements.

SULFRAMIN* AB-CONCENTRATE POWDER

Density, 0.4-0.45. Easy to perfume due to low odor. Low in dust content. Excellent money value.

SULFRAMIN' E LIQUID

Modified alkyl aryl liquid. 25% active. Unusual hard-water resistance and low end-point performance.

SULFRAMIN' AB SLURRY

Alkanes sulfonated to meet your specifications under rigid control. Tank cars and tank trucks only.

SULFRAMIN* AB-40 POWDER

Excellent detergency. Light in color. Less than 1% moisture. Screened, not ground, low in fines.

Wire, write or phone today for details

ULTRA CHEMICAL WORKS inc.

JOLIET, ILL PATERSON, N. J. AWTHORNE, CALIF. ULTRA hemical works

*T.M. Reg. U.S. Pat. Off.



BY ALBERT VERLEY & COMPANY

—a fresh, romantic fragrance that is yours to use freely, without prohibitive cost



Drange Blossom"V"

BY ALBERT VERLEY & COMPANY, INC.

-a veritable replica

of the living flower, and a worthy substitute

for the costly natural absolute

To the French, masters of the language of perfumes, Orange Blossom stands for virginity. From this age-old symbolism comes our American association of the flower with the climax of romance — the wedding ceremony.

To capture that fresh, romantic note and recreate it has long been the goal of the perfumer and the aromatic chemist, and a particular interest of the staff of Albert Verley & Company.

In Orange Blossom "V," this goal has been achieved. Here is an aromatic creation that is truly worthy to replace the natural raw material in your most significant formulas. You can use it as a complete substitute for the natural absolute in all forms of perfumery — with confidence that results are a credit to yourself and to your house. It gives you a conclusive answer to natural material shortages and excessive costs.

Orange Blossom "V" has made a place for itself, along with Jasmin Blossom "V" and other modern replicas, as a permanent part of the perfumer's array of primary odors. Write today for a working sample and prices.

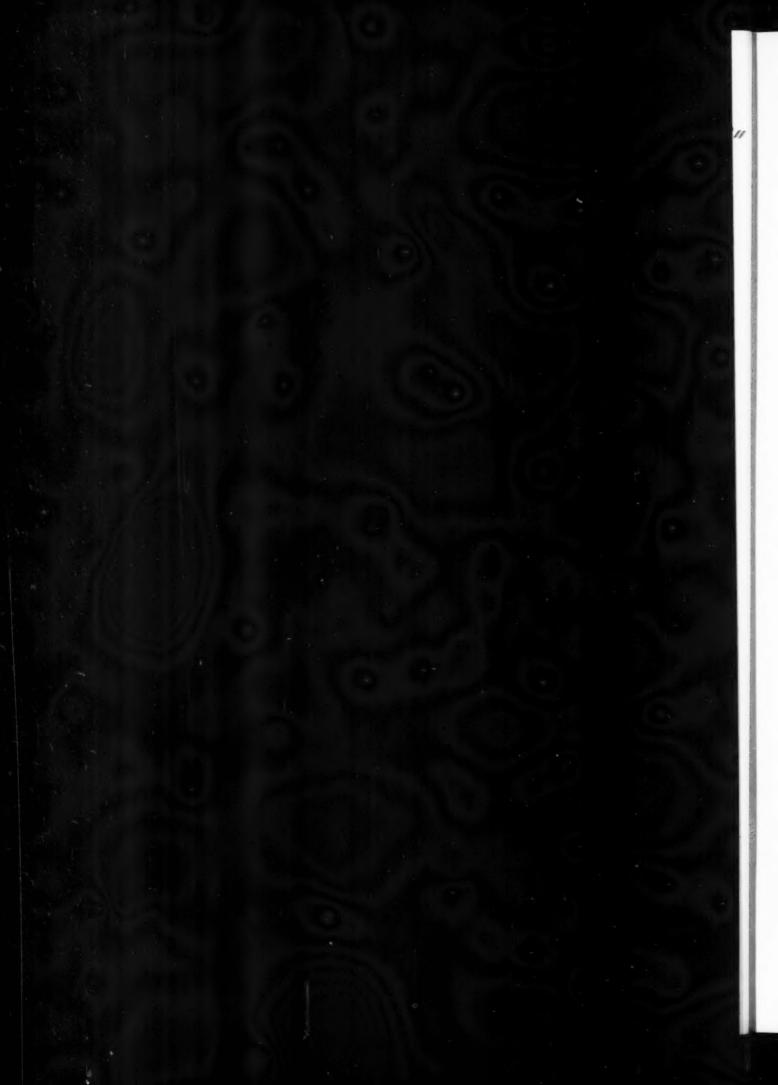
ALBERT VERLEY AND CO., INC. 466-472 W. Superior St., Chicago 10, III. 114-116 E. 25th St., New York 10, N. Y.

MEFFORD CHEMICAL CO. 1026 Santa Fe Ave., Los Angeles 21, Calif.

ALBERT VERLEY AND CO., INC. 222 Front St., East, Toronto, Ontario

Representatives in all principal cities throughout the world.





After Closing ...

Reilly Names Holstrum

Appointment of Harry L. Holstrum as plant manager of its Republic Creosoting Co. plant in Minneapolis, was announced recently by Reilly Tar & Chemical Corp., Indianapolis. He has been at the plant since 1924. Mr. Holstrum succeeds A. E. Larkin, who is retiring after 44 years association with the firm. Mr. Larkin will continue to serve Reilly as a consultant.

FTC Floor Wax Hearing

Proposed trade practice rules for the floor wax and floor polish industry will be discussed at a meeting of the Industry Committee to be held Sept. 15, at 10 a.m. in Room 268 Federal Trade Commission Building, Washington, D. C. The new proposals are based on the draft of March 17, 1953, on which the Commission held hearings in Washington, April 16. This will be the final meeting with the floor wax industry before the proposed trade practice rules will be submitted to the FTC for its consideration, Allen C. Phelps, assistant director and chief, expressed belief.

Rehns Products Moves

Rehns Products Co. recently announced it has moved from 48-10 43rd Ave. to new and larger quarters at 48-20 43rd Ave., Long Island City, N. Y. Mrs. Ruth W. Rehns is head of the firm, which manufactures and distributes sanitation chemicals and maintenance supplies.

Melvin Kamen Joins Firm

Election of Melvin Edwin Kamen as assistant treasurer was announced recently by A. L. Kamen, president of Kamen Soap Products Co., New York. The new Kamen assistant treasurer is the son of A. L. Kamen. The younger Mr. Kamen has been assigned the supervision of production of a contract received from the Navy Department for approximately 10

million pounds soap powder, at the company's Barberton, O., plant.



MELVIN E. KAMEN

New England Supply Show

A trade show of sanitation supplies and paper products will be held in the exhibit hall of the John Hancock Building, Boston, on Sept. 22 and 23, W. James Reider, president of George T. Johnson Co., Medford, Mass., sponsor, announced recently. This will be the first trade show of this type ever held in Boston, Mr. Reider stated. The show hours are 7:00 p.m.-10:30 p.m., Sept. 22, and 1:00 p.m.-6 p.m., 7:00 p.m.-10:00 p.m., Sept. 23. Admittance to the show is by invitation only.

Shell Shifts Staff

Several new changes in the marketing staff were announced recently by Leo V. Steck, marketing vice-president of Shell Chemical Corp., New York. J. J. Lawler, formerly district manager in Chicago, is sales manager for the company's Julius Hyman & Company division in Denver. Mr. Lawler started his Shell career at St. Louis in 1937 after graduating from the University of Missouri. W. C. Lowrey, formerly manager of the eastern division's solvents department in New York, became district manager at St. Louis. He is a graduate from the University of Alabama. A. P. Howe, senior technical salesman at Chicago, was transferred to San Francisco as western division chemical products manager. William Q. Mooney has become manager of the new employee development department. Mr. Mooney formerly was manager of the marketing service department in the eastern division. He began work with Shell in 1929.

Effective Oct. 1, W. E. Keegan will be assistant to the sales manager of Shell Chemical's eastern division. Mr. Keegan came to New York from Detroit where he was district manager.

New Lavatory Dispensers

Two new Griffin dispensers were announced recently by Merchandising Dispensers Inc., Los Angeles. The Griffin dispensers are specifically manufactured and adapted for the dispensing of "Wildroot Cream-Oil Hair Tonic" and "Frostilla Fragrant Hand Lotion." At the same time, the company announced that George Sloss, for 25 years branch and general manager of West Disinfecting Co., Long Island City, N. Y., is now sales manager for Griffin.

Soap Sales Off, Syndets Up

The volume of soap sales at plant, solid and liquid, for the first half of 1953, amounted to 809,595,-000 pounds, down 17 per cent from the same period in 1952, according to figures submitted by 85 companies to the Association of American Soap & Glycerine Producers, Inc. Dollar sales of all soaps totaled \$159,168,000, down 12 per cent from the first six months in 1952. Meanwhile, the volume of synthetic detergent sales, solids and liquids, was 902,307,000 pounds, an increase of 25 per cent over the first half of 1952. Detergent dollar sales, up 30 per cent, totaled \$205,995,000.

Other than liquid soap sales at plant in the second quarter of 1953 amounted to 356,690,000 pounds and declined 10.9 per cent from 400,286,000 pounds, in the first quarter. Dollar sales declined from \$81,444,000 for the first quarter to \$69,812,000 for the second quarter for a drop of 14.3 per cent. However, first quarter, 1953,

liquid soap sales totaled 702,000,000 gallons and 832,000,000 gallons for the second quarter, a gain of 18.5 per cent. Total dollar sales for the first quarter of 1953 were \$1,128,000 compared with \$1,451,000, a rise of 28.6 per cent.

Other totals are shown in the chart below:

New Aerosol Valve

A new "K-38" aerosol valve that dispenses pressurized products when the head is pressed in any direction, has recently been introduced by Aerosol Research Co., Forest Park, Ill. To prevent clogging, the "K-38" is designed with a metering orifice that does not come in contact with any

other part of the valve. It can be pressure or cold filled.



New "K-38" Aerosol Valve

DCAT Meets Sept. 24-27

The Drug, Chemical & Allied Trades Section of the New York Board of Trades will hold its 63rd annual meeting at the Pocono Manor Hotel, Pocono, Pa., on Sept. 24-27, according to a recent announcement by Lloyd I. Vilchening, chairman.

Final SAACI Golf Outing

The final golf outing of the year for the Salesmen's Association of the American Chemical Industry will be held at the Hackensack Country Club, Oradell, N. J., on Sept. 15. Prizes will be awarded to the winners of each flight.

Makes Metal Dispensers

Resumption of production of its polished chrome powdered soap dispenser was announced recently by Federal Tool Co., Chicago. The dispenser features a wide-opening top for easy filling; a small non-clog push up type discharge valve with agitator that prevents packing and insures constant quantity discharge. Standard heavy brackets mount unit to wall or horizontal pipe. Dispenser's specifications are: 93/8" high by 4" diameter; weight -two pounds three and one-half ounces (including bracket); and one and one-quarter quarts (liquid measure) capacity.

NACA Discusses Pesticides

New developments in insecticides, as well as legislation affecting them, will be discussed at the 20th anniversary meeting of the National Agricultural Chemicals Assn., to be held Sept. 9-11 at the Essex and Sussex Hotel, Spring Lake, N. J.

Product	Thousand	d Pounds	Previous Quarter	Thousand	Dollars	Previous Quarter
Bar Toilet Scap	115,380 118,759	1st qt. 2nd qt.	2.9	\$33,244 31,513	lst qt. 2nd qt.	—5.2
Yellow Laundry Bars	16,684 12,599		-24.5	1,467		-18.1
White Laundry Bars	49,189 42,729		-13.1	8,218 6,635		-19.3
Chips & Flakes— Packaged	19,454 15,293		-21.4	5,188 4,134		-20.3
Chips & Flakes— Bulk	33,367 34,457		3.3	2,901 2,777		-4.3
Granulated—						
Packaged	123,100 93,511		-24.0	22,981 17,689		-23.0
Granulated—Bulk	23,762 21,721		8.6	2,245 1,994		-11.2
Granulated	146,862 115,232		-21.5	25,226 19,683		22.0
Washing Powder-						
Packaged	2,442 1,998		-18.2	203 175		-13.8
Washing Powder— Bulk	4,942 4,256		13.9	327 287		-12.2
Hand Pastes and	4,000		10.0	207		1.6.6
Powder	2,177 2,345		7.7	194 215		10.8
Paste & Jelly	5,232 4,713		-9.9	629 518		17.6
Liquid Soaps	645 773		19.8	785 1,111		41.5
Miscellaneous	156 88		-43.6	28 22		-21.4
Shaving Cream	3,356 3,013		10.2	3,178 2,179		-31.4
Shaving Soap	1,045		15.6	641		
Packaged Liquid	1,200		13.0	472		26.4
Soap Shampoos	57 59		3.5	343 340		0.9
Liquid Synthetic						
Detergents-Packaged	1,035 1,189			4,822 5,176		
Liquid Synthetic Detergents—Bulk	1,169			1.587		
C-1/1 C	1,191			1,689		
Solid Synthetic Detergents— Packaged	441,135			94.560		
	378,175			80,786		
Solid Synthetic Detergents—Bulk	16,382 16,310			2,748		
Detergent Shampoos-				2,712		
Liquid Detergent Shampoo-	1,960 2,500			3,012 3,389		
Solid Snampoo-	5,387 3,766			3,244 2,270		

Boston BIMS Final Outing

The final golf outing of the season for BIMS of Boston will be held on Sept. 15, at the Nashua (N.H.) Country Club, Hart Harris Jr., of S. B. Penick & Co., New York, announced recently. The group held its midsummer golf outing at the Dedham (Mass.) Country and Polo Club on Aug. 13. Over 60 members and guests attended, including several guests and members from New York. Golf prizes were won by C. F. Karkalits Jr., Hoffmann-La Roche, Inc.; Gordon Mulligan, J. U. Starkweather Co., Providence; T. J. Conlon, Woonsocket Color and Chemical Co.; R. Allen Gowdy, Stanley Home Products, Inc.; Jack I. Vanderwater, R. W. Greeff & Co.; H. C. Milton, American Cyanamid Co.

Door prizes went to William H. McGrath, Warner-Jenkinson Co.; Emory M. Wright, Boston; Dave W. Schornstein, Dow Chemical Co.; H. S. Kishbaugh, Solvay Process division; Richard I. Swanson, Raffi and Swanson. A special prize of an outdoor barbecue set was won by E. E. Aldrich, Rexall Drug Co.

New Tornado Floor Machine

A new Tornado floor machine has recently been announced by Breuer Electric Mfg. Co., Chicago. A bulletin listing features of the new machine is available and includes a section on Tornado floor machine accessories. A special feature of the new machine is its new solution tank, streamlined in design and made of non-breakable, corrosion resistant "Royalite." This is said to reduce the weight on the handle for



less operator fatigue. The tank has a stainless steel screen at the loading opening, is equipped with a clear view plastic gauge, and has a capacity of four gallons. The patented non-clog solution valve at the lower end of the solution tank has three positions, for "On," "Off" and "Drain," which is selected by turning a knob.

The machine's motor is a heavy duty repulsion-induction type which starts under heaviest loads with approximately 15 per cent less current consumption than capacitor-start motors. The motor drives a planetary gear system of four helical gears for a 10 to one reduction ratio that gives a brush speed of 172 r.p.m. The new bulletin is available upon request to the company at 5100 N. Ravenswood Ave., Chicago.

New Detergent Sanitizer

A new foaming disinfectantdetergent in powder form, to be marketed under the trade name, "Trust," has just been announced by Essential Chemicals Co., Milwaukee. In addition to its use for clothes washing, the product is also suggested by the maker for use on floors, bathroom fixtures, toys, etc. A 19-ounce package retails for 28 cents. McCord Joins Cudahy

Appointment of G. M. Mc-Cord as superintendent of its oleomargarine plant in South Chicago, was announced recently by Cudahy Packing Co. of Omaha. Mr. McCord was formerly superintendent of the Davies-Young Co. plant in Dayton, O. Prior to that, he was in charge of the J. R. Watkins Co. plant in Memphis.

Towers Rejoins Westvaco

Reassociation of Ray C. Tower as assistant divisional manager, phosphate asles, with headquarters at New York, was announced recently by Westvaco Chemical division of Food Machinery & Chemical Corp., New York.

Mr. Tower just served a twoyear tour of duty with the U. S. Navy. In his new position, he succeeds John Peterson who has been appointed district sales manager at Chicago. Mr. Peterson was advanced to the position of assistant divisional sales manager at New York in August, 1951 after serving for two years as a sales representative in the Intermountain territory with headquarters at Pocatello, Idaho. Also, the company announced the recent resignation of W. Newell Wyatt as district sales manager at Chicago.

Demonstrating
Breuer Electric Mig.
Co.'s new 'Tornado' floor machine to the trade
press are (left to
right) agency account man, Walter
T. Craigle of Grimm
& Craigle, Chicago,
Price Williams,
Breuer assistant
sales manager; A.
M. Anderson, Breuer
general sales manager and Adam
Breuer, president of
Breuer.

At left: Close up of the new "Tornado" showing solution tank fastened to the unit for floor scrubbing.



d-Con Elects

In addition to the election of Jerome S. Garland, as president, Leonard Lee Ratner, chairman of the board,



JEROME S. CARLAND

of d-Con Co., Chicago, recently announced several new appointments were voted by the board of directors. Gerald H. Rissman was made vicepresident; Bernard Hoffman, secretary-treasurer; Martin Mendelsohn, director of sales; Paul Cunningham, assistant sales director; Seymour Gordon, Victor Moore and Frank Sitton, regional sales managers in Detroit, St. Louis and Washington, D. C., respectively; Alvin Eicoff, director of advertising; Joseph Abrams, director of research and education, and Harold Sugerman, director, industrial chemicals division.

Mr. Garland, a graduate of the universities of Chicago and Southern California, began his career with Douglas parts division, Chicago area, until becoming sales manager and vice-president of the newly-formed d-Con Company.

Pest Control Convention

Two decades of pest control, from 1933 to 1953, will be the theme of the National Pest Control Association Convention, to be held at the Hotel Nicollet, Minneapolis, on Oct. 19, 20, 21. Harlem B. Ives, Rose Exterminator Co., Detroit, is general chairman of the forthcoming national meeting. Tentative program details include discussions of "Classified Telephone Directory Advertising," "Bids and Specifications," "Public Relations

Program," "Legislation," "Serviceman's Handbook," "Standard Procedures," etc. Sanitation and termite control problems will also be taken up.

SOCMA Luncheon Sept. 9

The Synthetic Organic Chemical Manufacturers Assn. resumes its monthly luncheons on Sept. 9, at the Hotel Commodore, New York, at 12:30 p.m. Henry H. Fowler, Washington attorney, formerly director of Office of Defense Mobilization and Defense Production Administration will speak on "Tariffs and National Security."

Grain Sanitation Group

Formation of a Grain Administration Committee composed of 17 representatives of the U. S. Dept. of Agriculture, the Department of Health, Education and Welfare, the Food and Drug Administration, the Department of the Interior, land grant colleges and the grain trade was announced recently. The function of the group will be to check on grain sanitation to reduce losses and contamination caused by rodents and insects.

Appointments to the committee, made by the Secretary of Agriculture, Ezra Taft Benson, and Mrs. Oveta Culp Hobby, secretary of the Department of Health, Education and Welfare, include the following:

Howard H. Gordon, administrator, Production and Marketing Administration and Hazel K. Stiebeling, chief, Bureau of Human Nutrition and Home Economics, U. S. D. A.; Charles W. Crawford, Commissioner, and Dr. Glenn G. Slocum, chief of microbiology, Food and Drug Administration; Dorr D. Green, chief, Rodent Control Section, Fish and Wildlife Service, Department of the Interior; Dr. Harold Macy, Univ. of Minnesota; Dr. R. C. Smith, Kansas State College of Agriculture; Dr. J. C. Knott, Washington State College of Agriculture and Dr. E. L. Lutz of Purdue Univ., representing the land grant colleges. From the grain trade, are John R. Murray, National Grain Trade Council, Chicago; C. E. Huntting, Terminal Elevator Grain Merchants' Assn., Minneapolis; Roy F. Hendrickson, National Federation of Grain Cooperatives, Washington, D. C.; Joseph B. Gregg, Grain and Feed Dealers' National Assn., Kansas City; W. H. Bowman, Millers' National Federation, Minneapolis, and John T. McCarthy, American Bakers Assn., Toledo, Clarence I. Sterling, Jr., Division of Sanitary Engineering, Massachusetts State Department of Public Health, Boston.

Liquid Soap Dispenser

Latest in the line of American dispensers, the "B 9 Likwidurn," has recently been introduced by American



Dispenser Co., New York. The one quart liquid soap dispenser has a large filler-opening that is said to eliminate wastage of soap due to mishaps in filling. Installed flat against the wall, there is no bracket to cause leverage on the wall screws, and insures permanent installation.

CSMA 40th Meeting

The 40th annual meeting of the Chemical Specialties Manufacturers Assn., to be held at the Mayflower Hotel, Washington, D. C., Monday and Tuesday, Dec. 7 and 8, will feature, in addition to the usual program, a special ceremony marking the 40th anniversary of the association. Awards for winners in the "Aerosol Festival" package contest will be presented during the meeting. The closing date for entries in the Aerosol Festival is Oct. 15, with the judging to take place about a month later.

Among the topics to be discussed in individual papers or in panels are glass aerosols, the toxicity of residual type insecticide aerosols, iodine germicides, restaurant sanitation, evaluation of organic chlorine type insecticides, forty years of household and industrial insecticides, rodenticides, the problem of micelle structure formation of soaps, effects of electrolytes upon non-ionic surfactants, tallow alcohols and derivatives.





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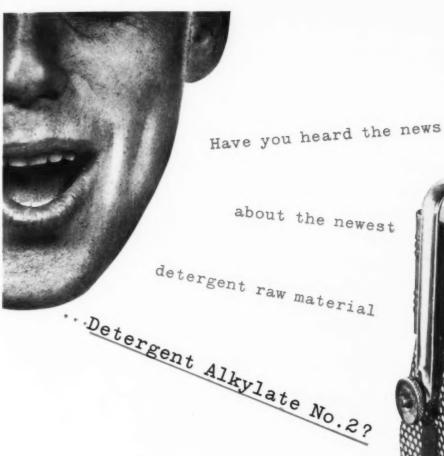


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ANNOUNCING...

The 40th CSMA anniversary issue of SOAP & SANITARY CHEMICALS to be brought out December 7, 1953 for the 40th annual meeting of the CHEMICAL SPECIALTIES MANUFACTURERS ASSOCIATION

at the Mayflower Hotel, Washington, D. C.



This special CSMA anniversary issue will be published as the regular December issue of SOAP &SANITARY CHEMICALS.

All persons registered at the 40th annual CSMA meeting will receive a copy of this anniversary issue at the meeting on Dec. 7 in addition to the regular circulation of that issue.

Please note that the deadline for advertising copy and plates is **November 10.** No extensions will be possible for that issue.

If you have plans for additional or special advertising in the anniversary issue, please let us know at the earliest possible moment. If you require additional information, we shall be glad to send it promptly.

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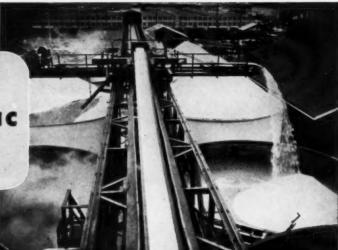
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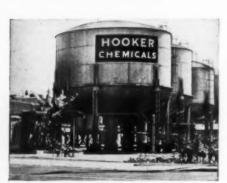


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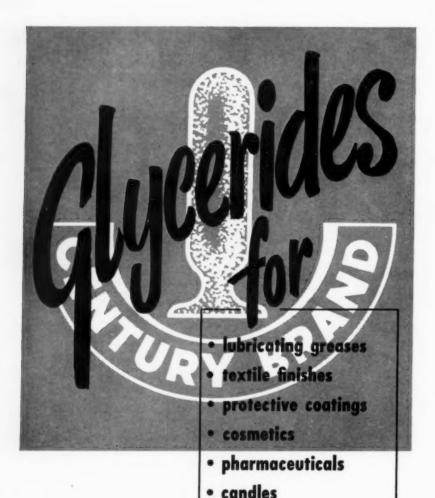
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■ CENWAX G (Hydrogenated Caster Oil)

CENWAX G is a glyceride chemically, although physically it resembles a wax. It is a hard, high melting point solid, available in finely beaded form, with practically no taste or odor. Typical applications are in lithium, barium or sodium greases; hot-melt paper coatings; extender for higher priced waxes in polishes. These CENWAX G specifications should suggest other uses:

F. F. A. (as Oleic Acid)	2.0 max.
Acid Number	4.0
Saponification Number	176-184
Iodine Value (WIJS)	1- 5
Melting Point (°C)	82- 85
Hydroxyl Value	155-165
Acetyl Value	137-148

■ CENTURY HYDREX 360 (Hydrogenated Tallow Glyceride)

leather dressings, etc.

This hardened tallow product is available in beads and its good color, high titre and low iodine value particularly suit it for use in certain textile finishes and lubricating greases.

Spec	ifications
Titre	(136.4-140.0°F) 58-60.0°C
Iodine Value (WIJS)	1-3
Free Fatty Acid	1-3%
Acid Number	2-6
Saponification Value	190-195
Color 51/4" Lovibond C	Column (Max.)
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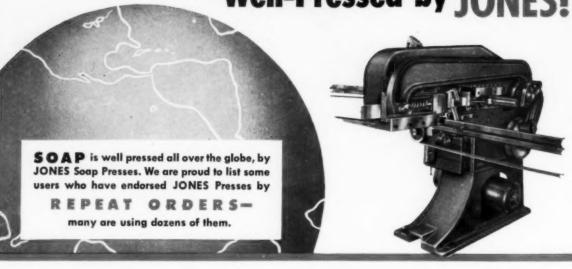
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P. O. BOX 485 CINCINNATI, OHIO

... in brief

as the editor sees it . . .

ering the consumption of these products by types of industries which have been compiled and issued by the Bureau of the Census for many years, are no longer available. These quarterly reports on fat and oil disappearance, in our opinion, were one of the most valuable services of the Census Bureau. They were far more accurate and useful than a lot of other census information which we could name, and which is still being collected. They always were a better guide to actual soap production than the soap figures of the Bureau,—or at least they were to us over the years.

Well we know that everybody is for economy as long as it affects the other fellow. And maybe it is thinking of this sort which is behind our protest against cutting out these statistics. We are heartily in favor of real economies which the administration is putting through and know that some people may be hurt. At the same time, we still feel that the relative value of the oil and fat quarterly breakdown has been far greater than Washington may suspect—and greater than some other statistical services which the Government is continuing. After all these years, we miss the oil and fat figures.

WAX REPORT . . . When vinyl floorings first came on the market with the announcement that they required no waxing, we felt that there was not a floor wax manufacturer who was not deeply disturbed. Subsequently, some of these latter under the auspices of the Chemical Specialties Manufacturers Association undertook a piece of cooperative research at the Snell laboratories to find out more about these no-wax claims. Cy Kimball,

recognized wax expert, supervised the work. The investigation came up with the conclusion that vinyl floor coverings if they are to retain their beauty and wearability require regular waxing.

This Kimball report was published, reprinted and widely distributed in the interest of all floor wax manufacturers and others who sell wax. Two manufacturers paid most of the freight for this reprinting and publicity job. This publication chipped in with some thousands of reprints which it also offered to the trade for free distribution. But, most of the industry was conspicuously out fishing when it came to stepping up to the cashier's window. Let George do it! So, without further ado, we draw the curtain here and let the reader call on his imagination for our further views on the matter.

BULK SOAPS . . . Bulk soap sales volume during the past eight months compares well with that of a year ago, but profits are smaller. Although the cost of all major items of overhead are up and some still rising, price cutting seems to be growing, rather than diminishing. The dilemma of the soaper specializing in bulk goods is whether to take the more sizeable orders at smaller profit margins or try to hold out for smaller orders for higher prices. In spite of the fact that bulk soap buyers are extremely price conscious—their operating costs are zooming upward, too-it would seem that a firm stand by one or more of the more important factors in the bulk soap picture might reverse the trend away from price cutting. On the basis of higher operating costs and a shrinking market brought about by constantly increasing shipping costs, higher bulk soap prices could be justified by some intelligent selling efforts. But who is to take the

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plunge and lead the way to what might be a healthier economy for the industry? Ah, that's the \$64 question. Ask any soaper and he will be glad to point to his competitor as the fellow most likely to fill the bill.

that soap production is still trending downward compared with synthetic detergents, we note that a new synthetic glycerine plant has been announced. This latter plant will increase synthetic glycerine output about 25,000,000 pounds, or some fifty percent. If the reduction in output of soap lye glycerine continues as it has over the past fifty years, there is no question that this added glycerine production will be needed. Nevertheless, we do not imagine that many soapers will be overjoyed at this lessening of potential future glycerine shortages.

Glycerine over the past few years has been a nice item in the profit column for soapers and fat splitters. It has softened the beating which some firms have taken on soap sales. Any new glycerine production must affect the level of future glycerine prices irrespective of demand. For the average soaper with by-product glycerine to sell, the gloom already has descended. But we've seen it far gloomier in the past in the glycerine outlook. Glycerine has a habit of fooling the market experts.

ODORS . . . In their advertising enthusiasm, the claim by marketers that this or that deodorant will destroy or banish or remove odors has not been uncommon. In a recent case before the Federal Trade Commission, the manufacturer of a well-known aerosol deodorant agreed to desist from the use of words such as "banish" or any other means to represent that its product "physically destroys odor particles." The FTC added that this was the type of case where there was a violation of the law "without intent to defraud or mislead."

For some time, the attitude of FTC toward deodorant claims has been no secret. The Commission frowns on any statements or representation that the usual aerosol or spray or other deodorant actually "deodorizes," that is removes the chemical constituents of the odor from the air or destroys them. This latest signed stipula-

tion to cease and desist by a leading manufacturer may be a useful guide to others in writing labels and advertising matter. To keep away from the words, "destroys, banishes, removes" and others of like meaning would appear to be the path of good sense. A precedent has been set which could make their use an invitation to trouble.

VAPORIZERS . . . Say the news headlines: "American Medical Association scores use of bug vaporizers." The AMA Committee on Pesticides has just issued another report condemning insecticide vaporizers. The issuance of this report coming shortly after the whitewash of several hundred New York doctors in a criminal prescription writing plot seems somewhat incongruous. As far as we know, the AMA issued no report on the crooked activities of a large group of its own members. So, why they once again go afield to condemn vaporizers when the U. S. Public Health Service and the Department of Agriculture are qualified and able to handle the matter, is still a puzzle to us. With a stinking cesspool in their own backyard, they point the finger at the fellow next door.

No brief is held here for or against insecticide vaporizers. We have spoken our piece on that score previously. But when the AMA Committee on Pesticides, on the basis of some of its own clinical evidence, issues a public report on vaporizers, we feel that AMA is injecting itself into a situation where it does not belong. We respectfully suggest that the findings should have been turned over to the USPHS or to USDA, or both. But, that course, we know, would not lend itself to appropriate publicity at which the AMA and its high-pressure publicity department is outdone by none. AMA has been protecting America's health in the newspapers for a long time. Its membership prates of ethics and the Association moves mountains to make the front page.

So, why should vaporizers be singled out for very special attention by the mighty AMA? Their condemnation might be in better taste if their own record were a little cleaner. In our opinion, they come into court with soiled hands—into a court where they never did belong.

as the reader sees it . . .

More on Vinyl Floors

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As wax manufacturers, we, too, are interested in giving the customer the proper information on the new vinyl floors. We cannot believe any type of flooring would not last longer, look better and save maintenance costs by the application of waxes as a protecting covering.

We have heard from our salesman hereabouts of only one place with the new vinyl flooring and we proved that it needed a protective coating of wax even if they covered the floor with steel plates.

D. W. MacCallum MacCallum Manufacturing Co. Toronto, Ontario, Canada

Wants Street Addresses

Editor:

I have subscribed continually for more than 25 years to Soap and Sanitary Chemicals. I go through each edition religiously and this publication has meant an awful lot to me in my business. I would never want to operate without this trade journal. Would you kindly tell me, why it is that when you list item and give the name of the manufacturer and city, why is it that you do not show the street address or box number?

... Why is it, if you are going to show the name of the manufacturer or source, why don't you show the address so that a person interested could correspond with them? Your trade journal is loaded with excellent information, from good authorities, and I shall always want to subscribe to it. I use this periodical in many ways and correspond with many of the advertisers when there is a way of addressing them correctly. . . . If I were operating on your plan I would show full information or none.

W. Leroy Wilcox Wilcox Products Corry, Pa.

We have had some bot discussions on this same subject right here in our editorial department. Two reasons for omitting the actual street address is the avoidance of the charge that we are allowing the use of editorial columns for advertising purposes, and secondly, trade custom. Most respectable trade magazines follow the custom of using the manufacturer's name and city location. However, we are considering your suggestion and possibly will modify our policy to include street addresses of new products items. Ed.

Enjoys Reading Soap

Editor:

As a regular reader of your publication, I enjoy it very much and never miss reading each issue as it comes in the mail.

> J. C. Van Esterik, Manager Leeds Soaps, Ltd. Toronto, Ont., Canada

CU Vinyl Report

Editor:

I enclose a copy of a letter sent recently to Consumers' Research Bulletin, Washington, N. J.

"The short paragraph on vinyl flooring in your August issue remarks that this type of floor covering is 'popularly supposed not to need waxing'. In expressing that thought, apparently you are misguided by advertising slogans on the part of manufacturers of that material.

"And, too, it seems to me you further slant—and one could almost say—distort the findings already made by the Foster D. Snell Laboratories by rather playing up one obscure mention made in the name of fairness to both sides of the question by those laboratories in their report. This last, of course, refers to your statement 'it is difficult to apply a floor wax of the water emulsion type to some of these floor coverings'."

Perhaps it will be well for you to re-read the Snell report in its entirety. I take the liberty of enclosing a copy. As a subscriber of many years standing, it will be most interesting to read later the results of your own tests and findings."

J. A. Granger, general manager Continental Chemical Co. Cleveland, O.

P&G Sales, Earnings Up

A net profit of \$42,031,863 after all charges, including \$46,499,-097 provision for taxes, for the year ended June 30, was announced recently by R. R. Deupree, chairman of the board of Procter & Gamble Co., Cincinnati. The profit is equal to \$4.35 a common share and compares with \$41,715,757, or \$4.32 a share earned in the previous year, when taxes took \$50,636,122. Net sales rose to \$850,-263,313 from the \$818,084,833 for the year to June 30, 1952.

Mr. Deupree told shareholders that the company was optimistic about sales for the current year. He said the volume of business had "grown in a very satisfactory manner." Dealer inventories are normal, or possibly a little below normal, he said, adding: "We see no reason why business should not continue to expand."

With present tax rates, however, it is impossible to increase net earnings, he declared, expressing the hope that net would go up after the excess profits tax is dropped. The tax is scheduled to end Dec. 31. He said that the company could look for "greater returns from here on out" from expenditures on foreign installations. Referring to the end of the Korean war, Mr. Deupree said that Governmental expenditures must continue for defense."

Dirksen in New Post

Appointment of A. J. Dirksen as eastern representative of the sales development department of American Potash & Chemical Corp., Trona, Calif., was announced recently by Alfred M. Esberg, vice-president. Mr. Dirksen received his Ph.D. in chemistry from the University of Wisconsin and for the past nine years has been associated with the market development division of Phillips Petroleum Co., Bartlesville, Okla. His headquarters are in the company's New York office.

Germicides for Soap



URING recent months, a considerable controversey has grown up in various journals, both in the U. K. and America, regarding the relative merits of D.C.M.X. and hexachlorophene as soap germicides.

It is the purpose of this article to view the results to date, and to attempt to reconcile the apparently conflicting claims of the respective manufacturers of these chemicals.

In order to do this, the question must first be asked, "What is required of a germicidal soap?"

Obviously, such a product must combine the properties of a competent germicide with those of a good soap; the most desirable property of the latter being its ability to emulsify dirt on the skin, and to remove it effectively; while that of the former is, empirically, its ability to kill a wide range of bacteria. The marriage of these basic properties will produce a germicidal soap which, when used for washing, will remove dirt from, and kill micro-organisms on the skin.

It is not sufficient, however, that the germicide should merely kill organisms on the skin while the soap is in use; it must continue to do its work for some time after the washing process is complete—and this is the second basic property which must be possessed by the germicide. This persistence in an active state on the skin is a most important requirement for any compound intended for use as a skin germicide.

Also, if the germicide is to be present on the skin for some time after washing, it is a further essential that it be non-irritating to the skin, and, in parallel with this, it must be non-toxic.

Having established what is re-

quired of the germicidal soap, it must now be decided what is the best means of testing it for the desired properties, always bearing in mind the ultimate use to which it is going to be put that is, for hand-washing, etc. In view of this it would be evident that the greatest attention should be paid to results obtained in actual practical trials, on human subjects, over varying periods of time.

In fact it can be argued that only the results of practical In Vivo trials should be admitted as evidence for or against a germicidal soap, for that is how it is going to be used, and such trials will furnish the data required regarding the substantivity of the germicide to skin, and its bactericidal effect on the skin flora.

The admission of such *In Vitro* tests as described by Gump & Cade (1) (2) and Lord & Parker (3) and others, should not be allowed to overshadow the results of the *In Vivo* trials, as the value of the information gained from *In Vitro* tests is questionable.

For example, Gump & Cade (1) describe tests to evaluate the efficacy of D.C.M.X. and hexachlorophene, in aqueous-alkaline solution and in soap solution, against S. typhosa (Hopkins), the test method being that of the FDA. However, the germicide is not intended for use in a test-tube against only S. typhosa, but is to be used against a much wider range of organisms on the human skin, and consequently the value of this type of test fails to appear.

Similarly for the zone of inhibition tests as described by Gump & Cade (1) and Lord & Parker (3). The results of these tests have only limited value, and further reference will be made to them later.

Although the above types of

A review of recent papers covering the use of D.C.M.X and hexachlorophene

In Vitro tests are considered to be of little value in a research aimed at finding the most efficient germicide to incorporate in a germicidal soap, there must of course be some standard basic test which can be applied to the germicide in order to evaluate its claim. But this test must be made subject to further and final trials In Vivo, using the germicide in soap, on human subjects.

Despite all that has been written in the past condemning it, it seems that the Rideal-Walker type of test is the best basis on which to screen the germicides, but it should not be done, as by Lord & Parker, by obtaining one figure for one random strain of one type of organism. Rather it is necessary to carry out a series of tests, using a variety of organisms, both Grampositive and Gramnegative, and of standard strains. Only in this way can the overall power of a germicide be established, and the value of a soap incorporating it be gauged.

However, even the Rideal-Walker test has its severe limitations (4), and use of it must only be made to limit to some extent the vast number of compounds which might conceivably have to be tested *In Vivo* only to find that their range of kill and persistence is not satisfactory.

In the matter of In Vivo tests, a wealth of information on different methods exists in the literature, but in all cases where D.C.M.X. and hexachlorophene are compared, the majority of workers use the technique due to Price (5) or one of its modifications. However, there seems no valid reason why the method described by Udinsky (6) or its modification as used by Gemmell (7) should not be used.

Having dealt with, and tried to evaluate, the various test methods, the results shown by these methods will now be reviewed with particular reference to the D.C.M.X.-hexachlorophene controversy.

This review will, in the main, be confined to the work done by Gump & Cade (1) (2) and by Lord & Parker (3), because in these three papers seem to be crystallized all the relevant data.

In Vitro Tests

IN all three papers, the authors describe *In Vitro* tests which they claim have some significance in an investigation into the properties of a germicide destined for incorporation in soap.

However, Lord & Parker appear to realize the limitations of such tests, although they lay some stress on the results obtained, and this would appear inconsistent.

Most stress is laid on (a) the phenol coefficient of 130 for hexachlorophene against Oxford staphylococcus, which they claim agrees well with the value of 125 against Staph. aureus obtained by Gump (8) and (b) the fact that a figure of only 70 is obtained for D.C.M.X. against Oxford Staph. while Gemmell (7) claims 180 against Staph. Aureus.

It is erroneous to draw conclusions from tests using different organisms, and it is especially so in the case of Oxford staph., which, due to its unreliability, is not a recognized standard strain of Staphylococus. Consequently, discussion shall be confined to the figures of 125 for hexachlorophene and 180 for D.C.M.X.—both obtained against Staph. aureus.

The strain of Staph. aureus used by Gemmell was the standard strain accepted for use in the British Standard R. W. test, and his figure of 180 has been confirmed over past years by numerous users of D.C.M.X.



By William Innes

Robert Haldane, Ltd. Paisley, Scotland



through the United Kingdom and abroad. However, while the strain of Staph. aureus used by those reporting on hexachlorophene is not known, the figures published by the various workers are by no means concordant. For example, Gump (8) reports a phenol coefficient of 125, but also states that when tested according to the FDA method in soap by independent laboratories, the following extremely variable results are obtained:

ciency of the two compounds is negligible. This is amply borne out by the established fact that in a Standard R.W. type of test D.C.M.X. has been consistently proven efficient by various workers and yet the zone of inhibition test apparently proves it worthless. Surely this points to the invalidity of the zone of inhibition test?

Turning now to the In Vitro tests, Lord & Parker make three categorical assertions on the basis of their cerned, and consequently the above statement by Lord & Parker can be held to be invalid; and indeed it is noteworthy that, from the above figures it can be shown that the rate of decrease of bacterial counts is greater in the case of D.C.M.X. than it is in the case of hexachlorophene. This is a most important point, as it is the rate of decrease which is of most value in the use of a germicidal soap.

It is noted that in their paper to a British journal (1), Gump & Cade do not show the data for the 15th day of their series of experiments.

(b) That the retarded buildup of skin flora after use of D.C.M.X. soaf, as claimed by Gemmell, is not due to a true reduction of the number of organisms by the continued action of absorbed D.C.M.X., but rather due to a carry-over of the germicide from the hands to the medium during the "sampling" in the test.

In order to substantiate this claim, Lord & Parker describe a series of tests where blood serum agar is used as well as ordinary nutrient agar, and claim that the higher counts on the former show that Gemmell's results were incorrect, in that the germicide carried over to nutrient agar remained active and killed any bacteria also carried over.

This seems a curious statement to make regarding a compound under test as a skin germicide, for, if the infinitely small amount of D.C.M.X. carried over on a swab from the back of a hand eight hours after washing is actively combating germs planted on a medium specially designed to encourage their growth, it is surely feasible to assume that the D.C.M.X. present on the hand is being similarly active. Also, by the fact that they imply the presence of D.C.M.X. on the hand after eight hours, Lord & Parker attribute to the compound one of the basic properties required by a skin germicide-that of substantivity to the skin-and by their argument they prove that the D.C.M.X. is present in an active state, and by their figures they prove that it is present to a relatively greater extent that hexachlorophene after the eight hour period. Thus, while the counts on serum agar plates might possibly give a more ac-

(a) Concentration of 1:1000 hexachlorophene kills Staph. aureus in 10 minutes (b) Concentration of 1:1000 hexachlorophene kills Staph. aureus in 2 minutes (c) Concentration of 1:500 hexachlorophene kills Staph. aureus in 5 minutes

Then, Udinsky (6) gives the figure of 1:1000 hexachlorophene killing the organism in five minutes, while Pritchard (9) states that hexachlorophene kills Staph. aureus at 37°C. at a concentration of 1:7000 (Phenol 1:90). This latter result shows a phenol coefficient of approximately 80, which by no means approximates Gump's figure of 125.

Such variations are disconcerting and certainly indicate the unreliable nature of this type of test.

It is noted that only figures for Oxford staph. and Staph. aureus are present in relation to hexachlorophene, but the effect of this compound on B. typhosus and the streptococci would also be of interest. In the case of D.C.M.X., well established R.W. values against B. typhosus (Lister) and standard streptococci are available and these are 250 and 160, respectively. These, together with the figure of 180 for Staph. aureus would definitely indicate the wide kill of this compound against both the Gram negative and the Gram positive types of organisms. It is most important that a skin germicide should be able to deal effectively with Gram negative organisms as these are the main contributors to the spread of disease through the handling of food, etc.

With regard to the zone of inhibition tests, these merely give some indication of the diffusibility, in agar media, of the compound under test, and so the results tabulated by Lord & Parker can only be taken to show that hexachlorophene diffuses through the medium more readily than D.C.M.X., and their bearing on the relative effi-

own results. These are:

(a) That hexachlorophene is the only soap germicide which "on continued use, markedly reduces the bacterial flora of the skin"

This statement is most sweeping, for although Lord & Parker do not show detailed evidence to support it, Gump and Cade (2) furnish figures which refute it.

In their Chart VII, Gump and Cade show the bacterial counts in the five basins of the Cade technique, for the first, 12th and 15th days. The soaps being compared are a one percent hexachlorophene and a two percent D.C.M.X., and at the end of the 15th day, the counts in the 5th basin for both soaps are substantially equal. In Table form, their results may be shown thus:

SOAP 1st Day 1% Hexa-2% DCMX Bosin chlorophene 2.5 2.5 1.75 0.9 0.5 0.55 0.25 0.25 SOAP 15th Day 1% Hexa-2% DCMX chlorophene 1.25 1.75 0.8 0.6 0.8 0.5 0.5 0.4 0.4

The figures are millions of bacteria per basin.

Thus, it would appear that there is really very little to differentiate between the two soaps as far as efficiency over a length of time is con-

curate picture of the relative numbers of bacteria remaining on the skin, the results shown for nutrient agar plates should be admitted equally and not discounted as being of no value.

While discussing the results of Lord & Parker's Experiment No. III (hand-washing), it might be instructive to compare the rate of build-up of the bacterial counts for D.C.M.X. and hexachlorophene over eight hours, as shown in their Table 3. The results will be seen best when tabulated as follows:

(a) Trial 1. Blood serum agar.

Soap Hrs.	Count	s vashing	Rate of Increase per hr.
	0 hrs.	8 hrs.	
D.C.M.X.	30	233	0.97 /hr. 2.915/hr.
Hexachlorophene	8	186	Z.915/ Nr.

Soap H		Count		Increase per hr.	
	0	hrs.	8	hrs.	
D.C.M.X. Hexachlorophen	e	11		40 22	0.453/hr. 2.75 /hr.

(c) Trial 3. Blood Serum Agar.

Soap Hrs		Count		shing	Increase per hr.
	0	hrs.	8	hrs.	
D.C.M.X.		24		235	1.225/hr.
Hexachlorophene		18		179	1.25 /hr.

Rate of

From these figures we can conclude that D.C.M.X. retards the build-up of skin flora at least as well as does hexachlorophene on a single wash, and indeed in all three trials, it is shown to be the superior of hexachlorophene, if only by a small amount in Trial 3.

As far as Table 4 of Lord & Parker's paper is concerned, it is doubtful whether it has any real value, as isolated figures such as are shown here have no real significance.

(c) That a single wash with a germicidal soap achieves nothing more than would ordinary soap.

In the face of published figures, opinions and observations, this assertion requires careful consideration.

On the basis of their own figures, it is obvious that the rate of build-up of germs on the hands is much greater in the case of the control soap than it is in the case of the D.C.M.X. soap, and this build-up is much more rapid for the former over the first hour after washing. For exam-

ple, in one instance, the build-up for the control soap over the first hour is approximately three times that for the D.C.M.X. soap.

Further, it is most curious that Lord & Parker should make the assertion that a single wash is of no value, when Maglio & Hannegan (8) quoting Kraissl (9) state that a hexachlorophene soap is used as a pre-operative bacteriostatic wash in the preparation of a patient.

And on the basis of their own figures, such a wash with a D.C.M.X. soap would be at least as effective.

Conclusions

THE conclusions to be drawn from the above analysis of published data, concerning D.C.M.X. and hexachlorophene as soap germicides, are

1. The results of In Vitro tests must not be taken as giving an accurate indication of the efficacy of any germicide destined for incorporation in soap. The true measure of the worth of such a compound must be, and can only be, made by practical hand-washing trials carried out in a standard and accepted manner.

2. Any germicide chosen for use in soap must possess control over a wide range of organisms, both Gram positive and Gram negative. It must also be persistent, non-irritating and non-toxic.

3. Figures published in recent months, by various workers, show that both D.C.M.X. and hexachlorophene, when tested under practical conditions, show good de-germing action on the skin, and it will be noted that figures, which purported to show that only hexachlorophene was active, have actually yielded the fact that D.C.M.X. is in every way as effective. In some instances, these figures have proved D.C.M.X. to be the superior of hexachlorophene as in the case of continuing activity after eight hours, as well as in its persistence on the skin.

References

- Gump & Cade, Manufacturing Chemist, 24, No. 4, 143 (1953).
- 2. Gump & Cade, Soap and Sanitary Chemicals, 28, No. 12, 52 (1952).
- 3. Lord & Parker, Soap, Perfumery & Cosmetics, 26, No. 5, 463, (1953).

 4. Prof. H. Berry, "A Review of Disinfectants and Disinfection," Pharm. J., 113, 183-187 (1951).
- 5. Price, J. Inf. Dis., 63, 301 (1938).

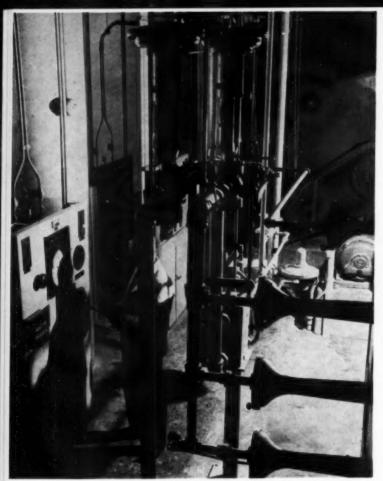
- 6. Udinsky, Journal of the Medical Society of New Jersey, 42, No. 1, 15 (1945).
- Gemmell, Soap, Perfumery & Cosmetics, 25, No. 11, 1160 (1952).
- 8. Gump, Soap and Sanitary Chemicals, 21, No. 5, 36 (1945).
- 9. Pritchard, Manufacturing Chemist, 23, No. 6, 227, (1952).
- 10. Maglio & Hannegan, Soap and Sanitary Chemicals, 28, No. 11, 38, (1952).
- 11. Kraissl, Plastic and Recon. Surg., 5, No. 6, 471 (1950).

Cite Renderer's Plight

More than 45 plants in the rendering industry have closed because of unprofitable prices for tallow and greases, hides and animal proteins, according to a recent statement by John J. Hamel, president of the National Renderers Association. Mr. Hamel said that most of the shutdowns were in rural areas where longer collection routes with continued high cost of trucking expense plus lower yielding grades of material did not enable plants to break even. Many plants which are still operating are cutting back their pickup routes substantially and only accepting material which they can process profitably, he said.

F. B. Wise, secretary of the association, pointed out that the severe decline in prices and demand for inedible animal fats is due in large part to displacement of soaps in recent years by synthetic detergents, most of which contain no domestically produced fats or oils. Mr. Wise said that the industry is working actively to bolster demand for tallow and greases by developing new uses. He also mentioned that the National Renderers Association has already contributed \$25,000 this year as an initial sum to be spent for new product research on tallow.

Industry spokesmen stressed the potential health and sanitation hazard caused by the cutback in rendering operations. It was pointed out that individual farmers are having great difficulty in disposing of dead animals. Also cited was a recent industry survey which was said to show that most local government disposal agencies are neither equipped nor will they permit fat-bearing animal wastes to be disposed of through their facili-



Soap Plant

Figure 1 — One of the many Brown flow meters utilized in this plant is shown in the left foreground, recording city gas flow to Surf spray tower heaters. Two Honeywell diaphragm motor valves are visible in the top of the photograph.

oils, as well as caustic, ensures the proper ratio of starting materials in the saponification kettles. Heat is supplied by direct steam entering through perforated coils in the kettle, with steam pressure being controlled so as to maintain saponification temperature.

The "soap" process involves a cycle of operations—including saponification, saponification change and finishing change—requiring a cooking time of approximately one week. Following this period, soap and lye samples of the product are tested by the analytical laboratory for quality. The soap is then pumped to thermostatically controlled storage tanks, where it is maintained in a uniform liquid condition prior to delivery to the finishing equipment.

Toilet Soap

FROM the storage tanks, the molten soap is fed to continuous chip dryers, where temperature and humidity are carefully controlled so as to provide a solid "chip" with uniform moisture content. The dried soap chips are conveyed from the dryers to temporary storage bins and from these bins into scale hoppers or mixers where perfume is added. The duration of the mixing operation is regulated by electric timers.

N the romantic era of California history, Rancho San Antonio in the Pueblo of Los Angeles was a vast family domain embracing 29,000 acres. With passing time, this area gradually metamorphosed into a thriving metropolis, with an industrial activity replacing the languid living of early caballero days.

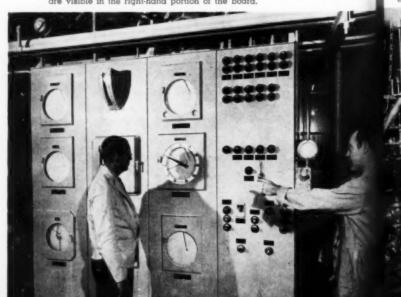
Now, on the Los Angeles scene, on what was once part of the Rancho San Antonio, stands the multi-building plant of Lever Brothers Co., New York, from which roll 4,500 freight carloads of products annually, including "Lux Toilet Soap," "Lifebuoy," "Lux Flakes," "Surf," "Rinso," "Silver Dust," "Breeze" and "Spry" shortening.

In erecting this plant, Lever took into consideration the latest technological advances so essential in progressive industry, as reflected in the modern manufacturing methods and high degree of instrumentation employed throughout the processing areas.

Oils, fats and caustic soda solution, the principal raw materials in soap manufacture, are received in tank cars and weighed on track scales. The caustic soda is pumped to storage tanks for eventual use in soap manufacture and in the refining of the raw oils and fats. Refining is effected at definite temperatures, with recording thermometers ensuring efficient results. In the bleaching operation as well, temperature is carefully controlled since excessive heat causes oxidation and color reversion in the fats.

Following refining and bleaching, the oils are filtered prior to pumping to soap kettles. Flow control of

Figure 2—Centralized panelboard records and controls drying air volume and temperature to the Surf drying tower. Similar panelboards are used on the powdered scap spray dryers. High-limit alarm lights are visible in the right-hand portion of the board.



Instrumentation By John Procopi, Process Engineer, Industrial Division, Minneapolis-Honeywell Regulator Co.

The soap then passes through banks of water-cooled steel-roll mills, with the temperature of effluent water from the mills being carefully controlled. In the plouding or extrusion of soap into a continuous bar, thermometers are employed to check the water inlet and outlet temperatures on the barrel and nose of each plodder. The bars are cut into identical shapes, following which individual bars are stamped and wrapped.

Powdered Soap

In the preparation of "Rinso," the liquid kettle soap is delivered to large crutchers and mixed with water softeners and other materials which improve washing qualities. The mix is brought to the proper temperature and pumped to a spray dryer, where the soap is dried into powder form. In all phases of this operation, centrally mounted automatic controlling and recording instruments ensure efficient production of material with uniform moisture content. In this manner, the wastefulness of under- or over-drying is eliminated.

Perfume is sprayed on the powdered soap before it is sifted on vibrating screens. Automatic weighing machines next dispense the proper weight of powder to cartons, prior to sealing and packing.

At the Los Angeles plant of

Lever Brothers, tons of special petroleum detergent paste arrive by tank car daily, for processing into "Surf." This paste is blended in crutchers with precise proportions of other chemicals. The mixture is then dried in spray towers, under close control of operating variables.

The use of automatic controls precludes the possibility of under- or over-drying by enabling the operator to: (1) control final product moisture through control of dryer outlet temperature, (2) regulate the pressure and volume of spray, and (3) control the temperature of the mixture prior to pumping to the spray dryer.

The dried, granular powder is screened, perfume is added, and the packages of finished product are ready for shipping after leaving a series of automatic machines which ensure full weight and careful sealing.

Vegetable oils from storage tanks are pumped to the processing area, where they are refined and bleached under the close regulation of industrial control instruments. After all chemical impurities have been removed, and the quality improved by the elimination of coloring and moisture, the oil is filtered in order to remove solid impurities and is ready for hydrogenation.

Operating variables in the catalytic hydrogenation process are also

regulated by means of automatic control instruments. Control of temperature is of paramount importance, since the process is exothermic and tends to generate run-away temperatures.

When the proper degree of hydrogenation has been reached, as determined by means of refractometers, the product is vacuum dried prior to filtration. After being filtered it is deodorized by subjecting the melted fat to high temperatures in a vacuum.

The shortening is again cooled and filtered through finer-textured paper prior to being finished.

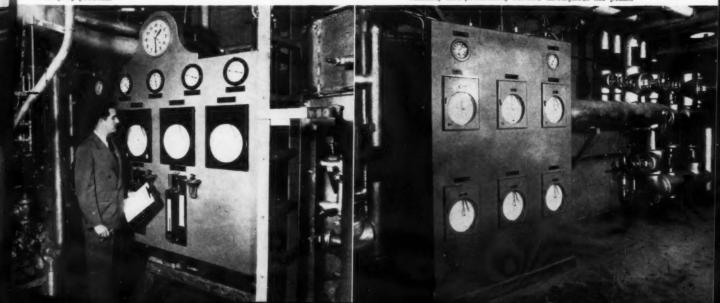
Other Instrumentation

N addition to the hundreds of instruments employed in actual control of processing units, still many others are utilized in the preparation of process fluids such as steam and hydrogen. The usual steam flow meter and CO, indicator are installed on each boiler with indicating draft gauges for furnace, fuel and air box. Recorders indicate the flue gas temperature to and from the economizers. Steam pressure gauges are used with each boiler, with a master pressure gauge on the manifold. Still additional instruments are employed in smoke and odor elimination, as well as in water treating.

Collectively, this formidable array of instrumentation is a vital component in the Los Angeles plant, most modern of its kind in the world.

Figure 3—Control panel in the emulsifying department. These Brown instruments control and record temperatures in the glycerine emulsifying process.

Figure 4—Centralized panelboard of steam flow integrating recorders which measure the quantity of steam flowing to Spry refining and processing centers throughout the plant.





Catalog One of Dixie's Best

NE of the best salesmen that a sanitary supply jobber can have is a good merchandise catalog. A silent salesman, it brings consistent returns to the distributor and helps to keep his products before prospects and customers.

A strong believer in the selling power of a catalog, based on successful past experience with them, is Dixie Janitor Supply Co., 210 Massachusetts Ave., N.W., Washington 1, D. C. Recently this fast-growing Washington jobber issued its third catalog, which is a revised and improved edition of the two previous ones. The constant customer demand for a new, revised catalog to replace worn or mislaid copies tends to explain what Dixie's customers feel about the value of a merchandise catalog.

"When we issued our first cat-

alog it was a gamble with us as to whether or not it was worth the expense," says Carl Himmelfarb, president of Dixie Janitor Supply Co. "But we decided to go ahead with the idea. Catalogs of the merchandise we stocked and sold were distributed to all of our customers through the mail and through personal contact by our salesmen," Mr. Himelfarb relates. "From the beginning, the catalogs paid off. Customers thumbing through one of our catalogs in the presence of a Dixie salesman discussed the items illustrated. Later we began to get an increasing number of orders over the telephone. As this continued we became convinced that our customers were constantly referring to our catalog and using it to place orders in between calls by our salesmen."

The current Dixie catalog at-

tractively reflects the progressiveness of the firm. Completely illustrated, the catalog has been broken down into seven departments to make merchandise selection and ordering extremely simple for the customer. Merchandise is classified as chemical specialties; brushes; paper products; mops, brushes and allied products; floor maintenance equipment; dispensers and sundries. All other merchandise is itemized under a miscellaneous classification.

BECAUSE of the increased business resulting from placing the ness resulting from placing the catalog in the hands of its customers, Dixie Janitor Supply Co. widened distribution to cover every possible prospect in the area covered by the firm. Dixie feels that the added expense incurred in widening distribution of its catalog to all possible con-

Modern exterior of Dixie Janitor Supply Co. (upper left) features spacious display windows and modern exterior with projected aluminum lettering. Carl Himmelfarb, president of Dixie, is a firm believer in the value of demonstrating sanitary supplies and equipment. Here he demonstrates one of several types of floor machines sold by his successful sanitary supply firm. A display stand Carl Himmelfarb designed for miscellaneous metal items sold by his firm is shown at lower left. Bottom right, Carl, and his brother, Arthur R. Himmelfarb, vice-president, confer. Arthur Him-melfarb is the "inside man."

sumers of sanitary products should be charged up to sales promotion activities. As a result of having its catalog reach more sanitary supply buyers, Dixie received orders from many firms never before called on by its salesmen, who felt that a competitor had these buyers "all sewed up."

Dixie's catalogs are mailed to all customers and prospective buyers including real estate owners and agents, government purchasing officials, hotel managers, institutional purchasing heads, service stations, restaurants, office building managers, etc. Every item in the catalog is illustrated and complete descriptive data and prices are included. This makes it easy to place orders either by mail or telephone.

Dixie's present new quarters in the nation's capital have been occupied by the firm for the past three years. The construction of the one story building, which provides 10,000 square feet of floor space on one level, is such that three additional stories can be added to the building should future expansion require it. The building boasts a modern facade featuring the company name in glistening aluminum projected letters. Adjacent to the building is a large parking lot, which encourages buyers to drive to the Dixie offices and showroom. The company's showroom and offices were recently expanded and additional new office equipment and machines have been installed.

"A showroom is essential to the sanitary supply business if a firm is to establish itself in the community," says Mr. Himmelfarb. "Customers, shoppers and the community in general get better acquainted with a firm that has a place of business that is inviting to the public. We feel our showroom helps us to introduce more customers to our business and for that reason we have completely modernized it. Many customers like to see what they are buying, as in the case

of floor machines and similar equipment. When such items can be displayed and demonstrated in comfortable, modern quarters the saleability of the merchandise is increased."

Founded in 1930

DIXIE Janitor Supply Co. traces its origin back to 1930, when Marcus Himmelfarb, founder, began selling a line of small brushes. At that time he worked out of a section of his home, which he had converted into an office. In calling on customers and prospects he found a growing number of requests for items other than brushes. Gradually he began to add new items to his line.

Today's well-lighted, open showroom and office, with large display window, reflects an observation and resolve made early in Mr. Himmelfarb's career. At that time he noted sanitary supply dealers were pretty well hidden from the public. This applied to their places of business, as well as to their merchandise. Marcus Himmelfarb was proud of his business and was eager to display his merchandise to his customers and the public. He reasoned that he was selling merchandise that promoted health, sanitation and better living. Such products, he believed, should be lifted from a background display and brought out into the open.

Not long afterwards, Mr. Himmelfarb's two sons, Carl and Ar-

Salesmen

By Phil Lance

New and expanded offices and showrooms (left) of Dixie Janitor Supply Co., Washington, D. C. New office equipment speeds up billing, order filling, etc.



thur R., joined him in the business and the three partners began to make substantial progress in the sanitary supply business. Early in 1951, Marcus Himmelfarb passed away, but not before he saw his business and the whole sanitary supply business for that matter, enter into a new merchandising era, when Dixie moved into its new quarters. With his passing, Carl became president, Arthur, vice-president, and their mother, secretary-treasurer.

Both brothers are actively engaged in the business. Carl handles the merchandising and promotion phases of the business, while Arthur can be referred to as the "inside man." As president, Carl covers key customer accounts, supervises salesmen, conducts sales meetings and oversees all other merchandising activities.

Dixie's Sales Set-up

IXIE Sanitary Supply Co. employs six salesmen, each of whom is assigned to a geographically separate territory. By setting up definite sales territories, salesmen do not cross over into another's preserve. Thus, they can make the most of any sales opportunities in their own sectors, for which they alone are responsible. The salesmen's accounts are made up of every type of customer, public buildings, hotels, restaurants, etc. This provides salesmen with a more balanced group of customers and enables them to sell nearly all the lines of merchandise stocked by Dixie.

As an incentive for salesmen, the firm has a bonus arrangement whereby each salesman participates in the earnings of the business. This share is being based on his sales total. The Dixie incentive plan is said to stimulate salesmen to greater efforts as they feel that they have an interest in the company.

Meetings are held regularly with salesmen and different sales problems of the business are discussed with them. At times, new products may be introduced and explained to them for added sales activity and, on occasions, a representative of one of the firm's suppliers may be on hand to discuss a product.

Tests Products

THE firm likes to handle nationally advertised products as well as private label merchandise. That is because it wants to back up the products it sells as well as the manufacturer that supplies them with these products. And in doubtful cases, the firm will test and try a product before adding it to their stock.

"We depend upon repeat business from our customers," says Carl Himmelfarb, "and must guarantee any products that we handle. For this reason, we only want the best to reach our customers. Nationally advertised products are already well established and in other cases, we want to know for ourselves the worth of a product before selling it."

In these cases, the firm submits the product in question to a laboratory for testing. If the company receives a favorable report, it may market test the item to get a reaction. Products approved in this manner will then be stocked and promoted to the trade.

In addition to these products, the firm has many under its own Dixie label. This private brand gives it products that do not come under any competitive pressure and it can stand

Arthur R. Himmelfarb, Dixie vice-president, is in charge of inventory control. He makes it a practice to check inventory often and completely.



behind them 100 percent. In many cases, where a customer is confused by the large number of brands of a certain product and the different prices, Dixie suggests its own brand. And these too, are tried and tested before being placed in stock.

The firm expedites its delivery in the best manner possible. Operating a fleet of four trucks, they cover routes within a 25 mile radius of the nation's capital. For greater distances, a public carrier is used. This assures most customers of 24 to 48 hour delivery, although it may be extended for three to four days because of distance in some cases.

The firm classifies all its inventory in the same manner as it has its catalog. This assures faster filling of customer's orders. A visible control file type of system is used for the inventory stocks and Arthur devotes himself to this phase of the firm's operations.

Continually checking his stocks, Arthur re-orders merchandise as soon as he notices it being reduced. This assures him of always having fresh stocks on hand and of the latest price changes.

"We advertise through our salesmen, our products and our catalog," Arthur says. "In that way, we can best know our customers."

Dentifrice Claims Hit

"Increasingly exaggerated" claims made for tooth pastes and tooth powders have produced growing concern among members of the dental profession, according to a recent editorial in the Journal of the American Dental Assn. The Journal said advertisers were riding "roughshod over the public" in the face of all scientific evidence to the contrary.

"Many of these superclaims are on the same low level as those made for discredited cancer cures and arthritis remedies," the editorial said. The Association's council on dental therapeutics, which evaluates dental products, has not recognized the claims of special curative qualities for any dentifrice now on the market on the grounds that inadequate evidence exists to substantiate such claims, the Association stated.

Table I. Place of Purchase

	Ite	etal ems hased		oart- ent ore		rug ore	1	and Oc ore		per rket	1	ouse lo ouse	Ban	ruty lop rber lop		cel-	Plo No Repo	ot
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Shampoos	950	100.0 100.0 100.0	170 64 126	10.9 6.7 7.0	849 604 1035	54.5 63.6 57.4	207 143 384	13.3 15.1 21.3	270 117 362	17.3 12.3 20.1	173 63 80	11.1 6.6 4.4	24	1.5	7 5 11	.4 .5 .6	31 25 46	2.0 2.6 2.6
Bath Preparations Other Than Soap	407	100.0	93	22.9	188	46.2	40	9.8	46	11.3	51	12.5	_		4	1.0	18	4.4

Because some respondents purchased at more than one place lines will total more than 100%.

T.G.A. Buying Habit Survey

HO buys what toilet goods, where, when, for how much and why is revealed in a survey conducted by National Family Opinion, Inc., for the Toilet Goods Assn., New York. Products covered by the copyrighted survey, which has just been released, include, among others, shaving soaps and creams, shampoos, tooth-pastes and powders and other than soap bath preparations.

The purpose of the study is to establish facts regarding the purchasing habits and usage of toiletry items by ultimate consumers, and to find out, within the limits of the technique used, the influence that different types of advertising exert on the toilet goods market. Thirty-seven individual tables list data on buying habits.

To test the wording and layout of the questionnaires, two pretest panels of 25 families each were selected and questionnaires were mailed to them on Feb. 11, 1953. Upon their return these questionnaires were used as the basis for correction of the final questionnaires, which were mailed out on Feb. 25, 1953, accompanied by a letter of instructions, to 1,500 consultant families comprising one and one half of the national panels.

Families in these panels participate in the activities of National Family Opinion, Inc., on an entirely voluntary basis without remuneration, and are selected cross sectionally by the use of four statistical controls; namely, geographic areas, population densities, income, and age groups. It should be noted that families selected compare closely with U. S. Census data in regard to the four controls mentioned above.

Of the 2,224 persons completing the survey, 81.0 percent reported they purchased tooth pastes and tooth powders. This was the highest percentage reported for any group of products. Shampoos, bought by 70 percent, were second high in the number reporting they bought a particular class of products. Shaving soaps and creams were bought by 42.7 percent and bath preparations other than soap

were purchased by 18.3 percent.

Drug Store Best Outlet

PRUG stores were the most important retail outlets for the sale of shampoos, shaving soaps and creams, tooth pastes and powders and other than soap bath preparations. Second most important retail outlet for three of the four items above were supermarkets. Department stores were given the preference as the second most important retail outlet for sales of other than soap bath preparations. Figures on sales percentages for various types of outlets selling toiletries are given in Table I.

For tooth pastes and powders, shampoos and shaving soaps and creams there is an indication that purchasers favor, more or less, markedly larger package sizes. From Table II it can be seen that larger package sizes are the favorites, and medium size packages second most popular for all of the four types of products covered here.

The largest percentage (31.5) of shampoo purchasers were in the

Table II. Size Usually Purchased

	Ite	ems Than						4 Oz. to 6 Oz. 6 Oz. and Over					Med	lium	La	rge	Size Not	
	No.		No.	%	No.	%	No.	%	No.	%	No.	nall %	No.	%	No.	%	No.	
Shampoos		100.0 100.0	9	.6	54 17	3.5 1.8	50 31	3.2	120 21	7.7 2.2	93	6.0	437 235	28.1 24.7	676 413	43.4 43.5	118 152	7.5 16.0
Toothpaste & Tooth Powder Bath Preparations Other	1802	100.0	24	1.3	80	4.4	63	3.5	6	.3	81	4.5	390	21.7	1009	56.0	149	8.3
Than Soap	407	100.0	2	.5	3	.7	7	1.7	28	6.9	47	11.5	87	21.4	170	41.8	63	15.5

Table III. Price of Size Usually Purchased

	Total Items Purchased			c to 9c		c to 9c	50c	-		e to Be		00 to	\$2.0 \$3.	-		.00 Over		e Not orted
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Shampoos	950	100.0	71 153	4.6 16.1	116 131	7.5 13.8	183 145	11.8 15.3	361 191	23.2	491 96	31.5 10.1	40 7	2.5	2	.1	293 226	18.8 23.8
Toothpaste & Tooth Powder Bath Preparations Other Than Soap		100.0	138	7.7	339	18.8	314	7.6	597	33.1	34	1.9	24	5.9	- 6	1.5	380	21.1

Table IV. Number of Units Purchased Yearly

	Total Items Purchased			ne nit		vo ilts	J. Un		5- Un		10 Un	-	15- Un		Mo Un	re	-	its ot orted
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Shampoos	950 1802	100.0	93 56 41	6.0 5.9 2.3	182 113 113	11.7 11.9 6.3	360 249 314	23.1 26.2 17.4	366 197 472	23.5 20.7 26.2	20 6 82 336	13.2 8.6 18.6	17 10 45	1.1 1.1 2.5	49 13 111	3.1 1.4 6.2	284 230 370	18.3 24.2 20.5
Bath Preparations Other Than Soap	407	100.0	61	15.0	84	20.6	75	18.4	51	12.5	21	5.2	3	.7	10	2.5	102	25.1

\$1.00 to \$1.99 package size price range. The next most popular shampoo package size range was 60 to 99 cents, with a percentage preference of 23.2. Shaving soaps and creams selling in the 60 to 99 cents price range were bought by the largest percent (20.1) of those responding. The 10 to 29 cents category was second in preference, as indicated by 16.1 percent. Tooth pastes and powders selling for 60 to 99 cents were preferred by 33.1 percent, while the second most popular price range was 30 to 49 cents (18.8 percent). The most popular price range for bath preparations other than soap was the \$1.00 to \$1.99 group, according to 34.4 percent of those responding. Figures on price preferences are shown in Table III.

Figures on the most number of units purchased yearly in the four categories of products ranged from two for other than soap bath preparations (20.6 per cent) to five to nine units for both shampoos and tooth pastes and powder, with percentages of 23.5 and 26.2, respectively. Most shaving soaps and cream purchases were three to four units yearly, as reported by 26.2 percent. Figures are shown in Table IV.

The survey shows the age groups into which over 90 percent of those participating fall. For shampoos, shaving soaps and creams, tooth pastes and tooth powders and bath preparations other than soap, most were in the 46 years and over group. Most of those reporting as heads of families were in the \$3,000 to \$5,000 a year income groups for shampoos, shaving soaps and creams, tooth pastes and tooth powders and bath preparations other than soap.

In determining the sex of the respondents, the survey found out that 67.1 percent of the shampoos are purchased by females and 64.3 percent of shaving soaps and creams are bought by males. Most tooth pastes and tooth powders are purchased by women (61.5 percent) and 77.7 percent of the bath preparations are bought by women.

Most respondents (63.6 percent) listed drug stores as first in importance as the type of outlet used most in buying toiletries. The others, in the order of their importance are: department stores, 21.1 percent; variety or five and 10 cent stores, 8.0 percent; supermarkets 3.0 percent and house-to-house .3 percent. Table VI also gives preferences for outlets regarded as second, third, fourth, and fifth in importance. Preference for the first choice of outlet used by age groups is also given in the survey. For 15-20 year olders 8.1 percent favor variety or five and 10 cent stores; 31.5 percent of the 21-30 year old group like supermarkets; 35.6 percent of the 31-45 group favor house to house selling; while department stores are given first preference by \$1.2 percent of

those 46 years old and over.

The starting use age range for most of those participating in the survey was 15-24 years for shampoos (24.7 percent), shaving soaps and creams (44.0 percent), and bath preparations other than soaps (30.2 percent). Use of tooth pastes and powder for most began at an earlier age; 37 percent reported they started in the 14 years and under range.

Mid-West Biggest Market

BY geographical areas the Central region showed the largest number toilet goods purchases, including shampoos (32.9 percent); shaving soaps and creams, (41.5 percent); tooth pastes and powder (32.1 percent) and other than soap bath preparations (38.3 percent). The South was second in shampoo purchases (28.0 percent) and shaving soaps and creams (29.1 percent). The Northeast was second in the reported number of tooth pastes and tooth powder purchases (28.0 percent) and bath preparations other than soap (27.8 percent).

Purchases in rural areas were greater than in cities having populations of from 2,500 to 25,000, 25,001 to 500,000 and over 500,000. Shampoos were bought by 37.0 percent in rural areas; shaving soaps and creams by 38.9 percent; tooth pastes and tooth powders by 35.9 percent and bath preparations other than soap by 32.2 percent. These figures, as can be

seen from Table V, range from one third to one half more than in other areas.

Reasons why certain types of retail outlets are preferred, as shown in Tables VII, VIII and IX, include "carries more complete selection"; "carries brand I use"; and "carries quality merchandise"; "gives all round service"; "conveniently located"; "have confidence in management"; "more helpful sales people"; "sells at lower price"; "have charge account"; "delivery service," etc.

Tables showing reasons why consumer switched from buying at one retail outlet to another are given for shaving products, dentifrices and hair preparations, among others. Convenience of one type of outlet over another was given by the large majority of respondents as the most important reason for shifting from buying at one type of retail outlet to another. In the case of shaving preparations, 12 percent said they shifted from five and 10 cent stores to drug stores and 28 percent said that convenience was the reason for shifting from buying at drug stores to supermarkets or grocery stores. Other reasons for shifting and their relative importance are shown

Table V. Population Densities

	Ite	Total Items Purchased		ral	25 25,	00- 000		001- .000	Over 500,000		
	No.	%	No.	%	No.	%	No.	%	No.	%	
Shawpoos	950 1802	100.0	576 370 646	37.0 38.9 35.9	315 185 354	20.2 19.5 19.6	389 223 464	25.0 23.5 25.7	277 172 338	17.8 18.1 18.8	
Bath Preparations Other Than Soap	407	100.0	131	32.2	79	19.4	121	29.7	76	18.7	

Table VI. Type of Outlet Used Most in Order of Importance

	1st in Importance		_	d in rtance	3rd Impor		-	in tance	5th in Importance		
	No.	%	No.	%	No.	%	No.	%	No.	%	
Number responding as indi-											
cated	1828	100.0	1281	100.0	1441	100.0	1175	100.0	1176	100.0	
Drug Store	1163	63.6	260	20.3	284	19.7	143	12.2	132	11.2	
Department Store	385	21.1	293	22.9	460	31.9	195	16.6	125	10.6	
Variety or 5c and 10c Store	147	8.0	314	24.5	408	28.3	261	22.2	145	12.4	
Supermarket	54	3.0	263	20.5	183	12.7	364	31.0	139	11.8	
House to House	6	.3	124	9.7	47	3.3	186	15.8	603	51.3	
Checked-No importance in-		4.0	0.73	0.1	50	4.1	00	0.0	20	0.7	
dicated	73	4.0	27	2.1	59	4.1	26	2.2	32	2.7	

in Tables VII, VIII and IX.

Convenience was the significant factor in changing of retail outlets for purchasing of dentifrices and hair preparations, according to the survey figures. An impressive 98.7 percent of the respondents reported they had switched from buying dentifrices in drug stores to supermarket and grocery stores for the reason of convenience.

The only other reason in changing place of buying of dentifrices, other than 2.5 percent for miscellaneous reasons, was price, which caused a reported 7.8 percent to shift from drug stores to supermarkets and grocery stores.

Less than half (42.9 percent)
of those participating in the survey
(Turn to Page 101)

Table VII. Reasons for Changing Outlet for Purchasing Shave Preparations

	Total		Conven-		Availa- bility		Quality		Better Selection		Price		Brand Preference		Miscel- laneous		Not Reported	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Number who changed type of outlet					_													
From 5¢ and 10¢ Store to: Department Store Drug Store Supermarket or Grocery	21		12 7		$\frac{1}{1}$		_1 _		2 2		- 1 1		2		3		=======================================	
From Department Store to: Drug Store House to House Supermarket or Grocery	4		2 2 1				=		111				_2		=		==	
From Drug Store to: 5¢ and 10¢ Store Department Store House to House Supermarket or Grocery A miscellaneous outlet	5 12 29		5 28 1		- 1 1		_ _ _ _		1 = = =		1 - -		1 1 2 -		1 3 2 -			
From House to House to: Drug Store	3				_		_		_		_		1		2		_	
From Supermarket or Grocery to: Drug Store			3		_		_		-		_		_		_		_	
Number not reporting what change was made			_															



WHAT'S

Veneer-O-Wax Corp., Chicago, recently adopted a new label design for its five gallon, one gallon and quart size containers shown at left. At the same time, the company announced it is adding to its line an insecticidal floor wax featuring gloss.



New "Fashion Bouquet" gift scap package featuring six, 21/4 ounce creamy-white scap cakes to retail for \$1.00, announced recently by Shulton, Inc., New York. Described as a "richly emollient complexion scap," the newest addition to the Shulton line is perfumed with a Gardenia bouquet fragrance. Scap is set off in colorful flat box.



Clark-Lurton Corp., E. Cambridge, Mass., is now packaging its gum turpentine and paint thinner in glass bottles by Anchor-Hocking Glass Co., Lancaster, O., featuring color applied labels. "Filmaseal" caps are by Ferdinand Gutmann & Co., Brooklyn.

MEM 3

"Aero Shave," by Boyle-Midway, Inc., New York, is now being packaged in a 12-ounce can, as well as the six-ounce unit in which the areosol shave cream was first introduced. Can by Crown Can Co., Philadelphia, valve by Clayton Pressure Products Co., St. Louis.

New "Palmolive for Men" Christmas gift package (extreme right) by Colgate-Palmolive-Peet Co., Jersey City, N. J., features deluxe size bottle of Palmolive after-shave lotion and tube of shaving cream. The gift box retails for \$1.79 plus tax. "Rapid-Shave" aerosol dispensed shaving lather may be substituted for the tubes of shaving cream in the gift package.

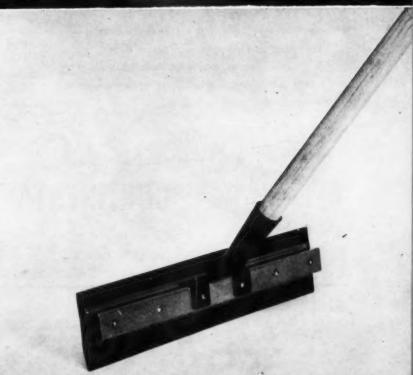
New candy stripe package for Trylon Tablet bubble bath of Trylon Products Corp., Chicago, is designed to tie in with the firm's TV advertising in Chicago, Philadelphia and Detroit. Package of 20 tablets retails for 59 cents. Wesley E. Sharer & Associates designed the package, and Acme Paper Box Co., Chicago, produced the box.

New double edge floor squeegee just put on the market by Warren Haviland Corp., St. Louis, features formed steel channel that adds to durability. Squeegee's flexible double edge, which adds life to the device, can be used on such rough surfaces as concrete floors.











Look at all three-

One of Continental's aerosol cans is tailor-made for you!

Between them, these three styles of aerosol cans will handle any sprayable product in the non-food field. As part of our tailor-made service, we'll lithograph them to your taste, deliver anywhere you say, put you in touch with valve suppliers and commercial fillers if you wish. Why not give us a chance to work with you—not just as suppliers, but as interested counselors and friends.

Dome Top—Domes attached and equipped with standard 1" curled opening for all popular valves, 12 oz. or 6 oz.

Concave Top — Tops furnished loose and perforated with hole-punch for specified aerosol valves, Regular (12 oz.) or Midget (6 oz.).

Dome Top — Domes furnished loose and perforated with hole-punch for specified aerosol valves, Regular (12 oz.) or Midget (6 oz.).





CONTINENTAL CAN COMPANY

CONTINENTAL CAN BUILDING

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Eastern Biv.: 100 E. 42nd St., New York 17 . Central Biv.: 135 So. La Salle St., Chicago 3 . Pacific Biv.: Ross Building, San Francisco 4



PRODUCTION PROBLEMS INVOLVE PHOSPHATES?



... Wash 'Em Right Out of Your Hair with GENERAL CHEMICAL PHOSPHATES!

If your production problems involve phosphates, you can rely upon General Chemical Phosphates to help you do the job . . . and do it right! That's because "G.C." Phosphates are always uniform. Each is made to meet the same strict specifications, shipment after shipment . . giving you a process material that can be depended upon for consistent quality and purity.

And wherever you may use phosphates-in making soaps and detergents, in textile finishing, in metal or industrial cleaning, or even in boiler water treatment-you will find there's a General Chemical Phosphate in a grade especially suited to your purposes.

Stocks are maintained at all of General's distributing stations from coast to coast. There is one located nearby ready to supply your needs promptly and regularly. Why not arrange to schedule your first shipment from it today?

CHEMICAL GENERAL DIVISION

ALLIED CHEMICAL & DYE CORPORATION

40 Rector Street, New York 6, N. Y.

Offices: Albany • Atlanta • Baltimore • Birmingham • Boston • Bridgeport • Buffalo Charlotte • Chicago • Cleveland • Denver • Detroit • Greenville (Miss.) • Houston Jacksonville • Kalamazoo • Los Angeles • Minneapolis • New York • Philadelphia Pittsburgh • Providence • San Francisco • Seattle • St. Louis • Yakima (Wash.) In Wisconsin: General Chemical Company, Inc., Milwaukee In Canadus The Nichels Chemical Company, Limited • Montreel • Teronto • Vancouver

Product

SODIUM TRIPOLYPHOSPHATE,

NasP3O10 (Tripoly)

TETRASODIUM PYROPHOSPHATE.

Anhydrous

(TSPP) (Pyro)

DISODIUM PHOSPHATE,

Anhydrous No₂HPO₄

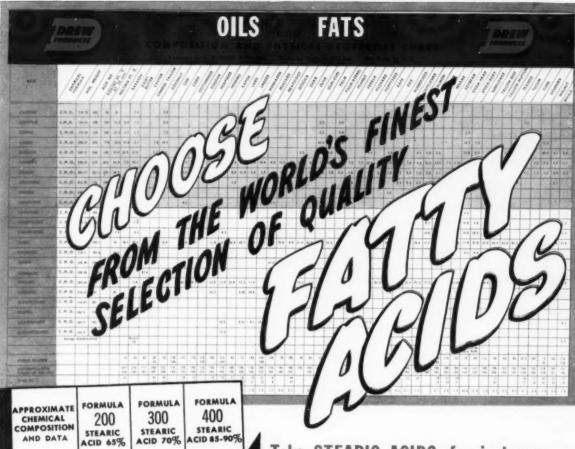
TRISODIUM PHOSPHATE,

Na₃PO₄ • 12 H₂O (TSP)

Grade



SOAP and SANITARY CHEMICALS



6.0% 6.0% MYRISTIC 6.0% 6.0% 21.0% 20.0% PALMITIC 85.0% 70.0% 70.0% STEARIC 3.0% 3.0% 4.0% OLEIC 99-103 99-103 99-103 FFA 60-64 58 Min. 56-57 TITRE°C. 3 Max. 4 Max. 6 Max. IODINE VAL. 196-204 196-204 196-204 ACID VAL. 196-204 196-204 196-204 SAP. VAL. 4.0/1.0 4.0/1.0 4.0/1.0COLOR

DREW HWH 58 Inedible Triglyceride, excellent for use in shaving creams. FFA: 0.5; lodine Val.: 3.0 Max.; Melting Point: 58°C.; Sap. Val.: 190 Min.

Take STEARIC ACIDS, for instance ...

The table at the left illustrates the properties which make Drew Stearic Acids a leading choice everywhere. These hydrogenated, distilled Stearics afford excellent color and odor characteristics, and help make products of high stability and long shelf life.

★FORMULA 200 (65% Stearic Acid) Equivalent to double pressed stearic. Excellent for production of non-ionic emulsifiers, metallic soaps. Available in small, non-sticking, easy-to-weigh flakes.

★FORMULA 300 (70% Stearic Acid) Equivalent to triple pressed stearic. Premium grade—for the most exacting specifications in hand lotions, creams, deodorants, brushless shaving creams, mascara, etc.

★FORMULA 400 (85-90% Stearic Acid) An all vegetable product with exceptionally high titre and low iodine value. For use whenever specifications are more critical than those met by any other stearic acid.

These are but a few of the high quality fatty acids which DREW produces in volume. When you specify DREW, you specify the world's finest Fatty Acids.

TECHNICAL PRODUCTS DIVISION

E. F. DREW & CO., Inc.

15 East 26th Street, New York 10, N. Y.
CHICAGO PHILADELPHIA BOST





eaustic soda « soda ash « chlorine « sulphur » sulphuric acid « bicarbonate of soda » ammonia » sodium nitrate « nitric acid » hydrazine products Sodium methylate « sodium chlorite » hypochlorite products» dry ice and carbonic gas » ammonium sulphate » ethylene oxide and glycols » methanol

Winser Leaves Armour

Retirement of R. A. Winser, after 29 years of service, was announced recently by Armour & Co., Chicago. Mr. Winser had been employed, until his retirement, in the firm's technical sales service department. He first entered the employment of Armour in the fall of 1924, after he received a Bachelor of Science degree from Illinois Institute of Technology. Immediately assigned to laboratory analytical work in soap and soon after to installed control in manufacture, he moved into the industrial soap sales department in 1930. After sales service and salesmen's educational work, he was made assistant general sales manager of the department, where he remained until 1951, when he moved into technical sales service.

Leeds Soaps Expands

Leeds Soaps Ltd., Toronto, Canada, manufacturers of soap flakes, soap powders and oil processors, recently announced the addition of a sulfonation and synthetic division for the production of sodium lauryl sulfate, an anionic detergent used for wool-scouring and wool-washing. Along with this, the firm produces cetyl-oleyl sulfate, dodecylbenzene sulphonates for the industrial trade. Also, dishwashing compounds, emulsifiers and foam stabilizers for jobbers and processors; and n-methyl taurine detergents along with wetting agents of low foaming varieties for the textile trade. Specialties for the shampoo and cosmetic industry are also made by the company.

New Shell Glycerine Unit

Plans for a new Shell Chemical plant at Norco, La., to increase the country's supply of glycerine was announced recently by Richard C. Mc-Curdy, president of Shell Chemical Corp., New York. With construction starting immediately and completion scheduled for late 1954, the new plant will produce allyl chloride and epi-

chlorohydrin. Its output will be used to increase Shell Chemical's glycerine production by 25,00,000 pounds per year, Mr. McCurdy stated. It is the



RICHARD C. McCURDY

first step in Shell Chemical's current glycerine expansion program. In 1948 Shell Chemical produced the country's first commercial quantities of synthetic glycerine, from petroleum raw materials, and now supplies more than 20 percent of the American market. The Norco plant, an entirely new site for Shell Chemical, is designed to operate in conjunction with the Shell Oil Co. refinery there and will use propylene and other feed stocks it produces. Employing about 150 workers initially, it is expected to play a major part in the continuing growth of the New Orleans industrial area.

Cowles Appoints Calo

Exclusive sales rights for "Cowles Ultrafast Dissolver" machines in four mid-western states have been granted to Philip E. Calo Co., Chicago, Edwin Cowles, president of Cowles Co., Cleveland, announced recently. The Calo company will handle sales of the "Dissolver" machine throughout Illinois, Iowa, Minnesota and Wisconsin. Cowles has only one other distributor at the present time, Warde Associates, Detroit, which handles sales in Michigan.

Tom C. Brown Dies

Tom C. Brown, 74, retired district manager for Procter & Gamble Co., Cincinnati, died Aug. 5, in a Dallas hospital. Mr. Brown had worked for Procter & Gamble for 41 years before his retirement in 1945. He joined the firm in 1904 as a member of the advertising department. He went to Montana as a jobbing salesman in 1909, and in 1910 was transferred to the Texas territory. He became sales manager of the Dallas district in 1919, and district manager six months later. He is survived by his wife; a foster son, Joe C. Brown and a foster daughter, Elenore Brown.

C-P-P Picks New TV Chief

Following the recent resignation of Leslie T. Harris as director for 12 radio and television programs of Colgate - Palmolive - Peet Co., Jersey City, N. J., the company named George T. Laboda, his assistant, to succeed him. Mr. Harris indicated he might enter the television packaging field. Mr. Laboda has been with the company seven years, heading advertising research before becoming Mr. Harris' assistant.

Emery Forms Own Firm

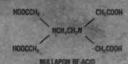
Charles Emery, formerly merchandising manager of the toilet goods division of Colgate-Palmolive-Peet Co., Jersey City, N. J., who resigned after 30 years service in the sales and merchandising department, recently announced the establishment of his own business, Charles Emery & Associates, 1 South King Street, Honolulu, Hawaii. Mr. Emery spent 15 years in Hawaii for Colgate.

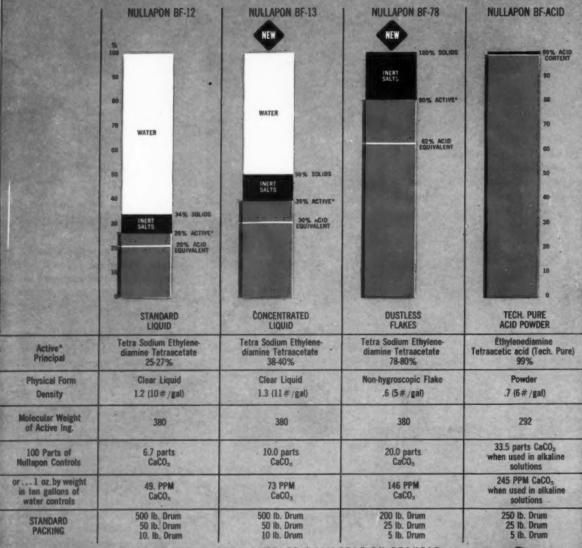
Mr. Emery managed its toiletry business in that market for several years, prior to his appointment to various West Coast and home office assignments. Several manufacturers in the toiletry and allied fields have signed agreements with Charles Emery & Associates for Hawaiian representation.



NULLAPONS

are outstanding sequestering or chelating agents capable of controlling, by deionization, undesirable di- or tri-valent metal ions in aqueous solution.





8 OUNCE LABORATORY SAMPLES AVAILABLE ON REQUEST

ANTARA. CHEMICALS

DIVISION OF

GENERAL DYESTUFF CORPORATION

435 HUDSON STREET . NEW YORK 14, NEW YORK

SALES OFFICES: Now York . Boston - Providence Philadelphia Cherlotte, N. C. . Chicago . Fortland, Ore. . San Prancisco
IN CANADA: Chemical Bavelopments of Canada Limited, Montreel





JOHN THOMPSON

D&O to Open Toronto Office

Establishment of a branch office in Toronto, Canada was announced recently by Dodge & Olcott, Inc., New York. The Toronto branch is under the supervision of John Thompson. He has been a sales representative in the industry since 1945,



LOUIS MIGNACCA

covering Toronto and Ontario during this period.

The firm also announced the appointments of Louis Mignacca and William A. Gray to its sales staff. A graduate of Brown University, Mr. Mignacca was formerly a sales representative for Pearson Pharmacal Co.,



WILLIAM A. GRAY

working on both the East and West Coasts. He is assigned to the New York area. Mr. Gray is working out of the Chicago branch office. His previous experience included promotional work for General Mills, A. E. Staley Co., National Dairy and Balfour-Guthrie Ltd.

New Liquid Detergent Base

Development of a new liquid detergent base was announced recently by Stepan Chemical Co., Chicago. The new product, called "Stepanol B-153," is an ammonium alkyl phenoxy polyozyethylene sulphate and is a clear amber liquid. It is said to offer good detergency, foaming qualities, and foam stability in both hard and soft water. It is also said to be mild to the skin.

CU Views Synthetics

A report on the effectiveness in soil removal and tendency toward minimum soil deposition by five leading household synthetic detergents was published recently in Consumers' Research Bulletin, Washington, N. J. "Tide" received CU's highest recommendation. The product, made by Procter & Gamble Co., Cincinnati, was listed as having a good soil removal at low and moderate concentrations; an anti-graying action that is "very good" in soft water and "good" in hard water. "Oxydol Detergent" by Procter & Gamble, and "Rinso Sunlight Detergent," by Lever Brothers Co., New York, were listed as having "good" soil removal at low and moderate concentrations; and an anti-graying action that is "very good" in soft water and only "fair" in hard water. However, "Kirkman All-Purpose Detergent," and "Super Suds Detergent," both made by Colgate-Palmolive-Peet Co., Jersey City, N. J., were slightly less effective in soil removal in both hard and soft water than the brands named above, CU stated.

Essential Chemicals Grows

Expansion of its sales force and national sales organization has recently been announced by Essential Chemicals Co., Milwaukee. Paul Sellmer, formerly manager of Merchants Chemical Co., was named as representative in the Middlewest and Don Finrow, manufacturer's agent, was appointed to represent the firm in the Seattle and Northwest area. The company is also contemplating expansion on the Eastern Seaboard, according to James H. Wheeler, president. The firm acquired the soap division of Hercules Powder Co. in 1944, and produces bases for soaps and synthetic detergents that enable manufacturers and distributors to add water at the point of delivery. It also produces a germicidal detergent for laundries, among other products.

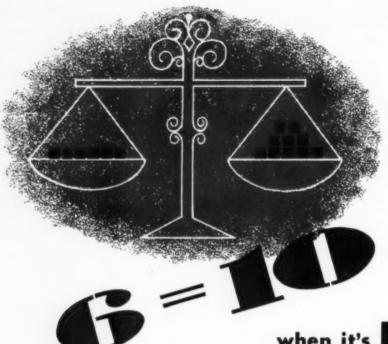
New Soap Specifications

Several new ASTM specifications—forulated by Committee D-12, (Soaps and other Detergents) American Society for Testing Materials—were approved at the 1953 annual meeting of the Society, held recently at Atlantic City, N. J. Approved were: Buffering action of metal cleaners (D 1279-53T); total immersion corrosion test for soak tank metal cleaners (D 1280-53T); Rinsing properties of metal cleaners (D 1281-53T); analysis of sodium bicarbonate (D 501-53T).

Committee D-21 (Wax Polishes and Related Materials) submitted methods of test for: Total ash and silica in water-emulsion waxes (D 1288-53T); Nonvolatile matter (total solids) in water-emulsion waxes (D 1289-53T); Sediment in water emulsion waxes by means of centrifuge (D 1290-53T).

Represents Perl in Canada

Appointment of Canners' Machinery Ltd., Simcoe, Ontario as its exclusive agents for all Canada, was announced recently by Peri Manufacturing Co., Brooklyn. All machines sold in Canada are serviced by the Canners' company.



when it's DRYMET the economical detergent silicate

Sixty pounds of DRYMET-anhydrous sodium metasilicate-will do the same amount of work as one hundred pounds of pentahydrate sodium metasilicate! You get approximately two thirds more chemical value in DRYMET, yet the price is less than one fourth higher at the producing factory!

DRYMET contains no water of crystalization. DRYMET is more economical to use on the basis of Na2O (alkalinity) and SiO2 (silicate) than any other type of anhydrous or hydrated detergent silicate.

If you are compounding with detergent silicates, investigate DRYMET for higher concentrations and longer mileage in such products as:

- 1) Floor Cleaners
- 4) Dairy Cleaners
- 7) Soap Builders

- 2) Laundry Products 3) Metal Cleaners
- 5) Dishwashing Compounds 8) Paint Cleaners 6) General Purpose Cleaners
 - 9) Paper De-inking Compounds



If you are using detergent silicates directly in your operations, investigate DRYMET

- 1) Reductions in product costs
- 2) Reductions in freight costs
- 3) Reductions in storage costs
- 4) Reductions in handling costs
- 5) Reductions in labor costs

* Reg. U. S. Pat. Off.

HEAVY CHEMICAL DEPARTMENT

COWLES CHEMICAL COMPANY

7016 EUCLID AVENUE

CLEVELAND 3, OHIO

New Chemical Sales Co.

The establishment of a new chemical sales company, K. A. Steel Chemicals, Inc., 7450 Stony Island Ave., Chicago, was announced recently by Kenneth Steel, president of the firm. The newly formed company serves industries in the Midwest, and handles crude tall oil, a new and improved fractionated tall oil, iron sulfates and industrial grade ammonium sulfate. Mr. Steel had been associated with West Virginia Pulp and Paper Co., New York from 1939 until June, 1953. He was graduated from Pennsylvania State College with a Bachelor of Science degree.

Albert Schwartz Dies

Albert G. Schwartz, 87, retired former president of Werk Soap Co., which consolidated two years ago, with Procter & Gamble Co., Cincinnati, died recently at his home in Clifton, O. He had been retired for the past 25 years. He leaves two daughters, Mrs. Millard Romaine and Mrs. Theodore R. White.

Fluid Chemical Expands

Appointment of Seymour Turner as sales manager of Fluid Chemical Co., Newark, N. J., private label aerosol filling and packaging organization, was announced recently by Edmund Bennett, president. Mr. Turner had been with Verona Chemical Co., Newark, N. J., for five years prior to joining Fluid Chemical. Expansion of the company sales staff is under way, and Lewis Jordan, formerly of Jordan Laboratories, Wilton, Conn., has been appointed a sales representative in the metropolitan area.

In addition to expanding its sales and service activities, Fluid is adding to its production facilities. A new building, adjacent to the present plant on Mount Prospect Ave., is set for completion by the end of September. The new unit, with the older factory building, will provide the firm with more than 40,000 square feet of floor space. Offices will be moved to the new building which, in addition, will provide storage space and a new laboratory on the second floor. Existing manufacturing facilities in the older

building will be expanded when the new building is occupied. Fluid also occupies a one story building on Summer Ave. in Newark.

Specialty Names Hubler

Appointment of John A. Hubler as sales promotion manager was announced recently by Specialty Papers Co., Dayton, O. He is in charge of the firm's promotion, advertising and market research activities. Mr. Hubler, who started with the firm in 1938, has worked in the sales department and as a sales representative in eastern and midwestern territories. He was also associated with the advertising department of Standard Register Co. and Yeck and Yeck Advertising Agency, both in Dayton. He is a graduate of Williams College, Williamstown, Mass.

New Davison Sales Offices

Sales expansion in the industrial chemicals division of Davison Chemical Corp., Baltimore, has led to the establishment of three new sales offices under the direction of resident field service engineers, D. N. Hauseman, vice-president, announced recently. Each office is the center of a sales region covering several states.

Representatives of Davison are: C. E. Meginnis, 19 S. LaSalle St., Chicago; C. Victor Bolles, Lake Charles, La., and E. Kyle Ruble, Atlas Building, Columbus, O. Territories covered by these representatives were formerly serviced out of Baltimore headquarters. A sales office previously established in New York, is now headed by P. H. McLaughlin, as field service engineer.

Trabbold Joins Knolar

Appointment of George B. Trabbold as supervisor of sales for "Nola Soap Flakes" and "Magic Washer" in the Philadelphia area, was announced recently by Herbert Kranich, president of Knolar Products, Inc., Camden, N. J. Before joining Knolar, Mr. Trabbold was in charge of Philadelphia retail sales and assistant district manager in that territory for P. J. Ritter Co. He has also been the wholesale trade contact for Hunt Foods of California.

Martin Kupprat Dies

Martin Kupprat, 59, purchasing agent and traffic manager for Davies-Young Soap Co., Dayton, O., died recently. He had been associated with the soap concern about 30 years and was a member of the Purchasing Agents Association. His wife survives.

Davison's Sales Rise

Net sales of Davison Chemical Corp., Baltimore for the fiscal year ended June 30, 1953, totaled \$56,-580,114, a new record and a gain of 14 percent over the \$49,510,588 for the preceding 12 months, the best previous year, according to the annual report issued recently. Net income in the latest period was \$2,926,138, equal after preferred dividends to \$3.27 a common share on 803,410 shares outstanding. This was 39 percent greater than the net of \$2,-105,178, or \$3.24 a share on 642,667 shares outstanding, for the 1952 year. Chester F. Hockley, chairman, noted that the sharply higher sales and earnings were recorded with only minor benefits from the company's current \$26,000,000 expansion program, which was still mainly in the construction stage.

Industrial Names Shapiro

Election of Robert D. Shapiro as vice-president was announced recently by Industrial Soap Co., St. Louis. A graduate of the University of Illinois, Mr. Shapiro served with the Air Force prior to his election to office. Industrial Soap Co. is a compounder of detergents and sanitary chemicals as well as a distributor of janitor supplies and building maintenance equipment.

Laundry Equipment Sales

Sales of home laundry equipment continue to show substantial gains, the American Home Laundry Manufacturers Association reports. Factory sales of standard size household washers in May numbered 286, 515 units, an increase of 34.1 per cent over 1952 figures. Automatic tumbler driers were also up 14 per cent to 32,-867 units. Sales of automatic ironers however, declined 26.2 per cent over last year, to a total of 9,323 units.

Buckeye "SYND" ...

the concentrated, neutral synthetic detergent cleaning compound

works wonders on ALL FLOORS • WALLS • WOODWORK
... develops a clean, fresh odor.

Buckeye "SYND" is one of the latest developments of the Davies-Young Laboratories. This powerful, liquid detergent cleans quickly, thoroughly, safely and economically . . . it actually dissolves dirt and soil! Yes, Buckeye "SYND" is successfully used by hotels, restaurants, stores, apartments, schools, office buildings, hospitals, theatres, institutions, churches, and all commercial, residential and industrial buildings.

NEW! DYJET-SYND METHOD!

DYJET IS FREE!

FAMOUS DYJET DISPENSER FREE WITH SYND PURCHASE; SAVES TIME! SAVES MONEY!

WRITE, WIRE, PHONE . . . FOR FURTHER INFORMATION ON THE

NEW DYJET-SYND PLAN! NOW!

SYND CARRIES THE NAME BUCKEYE your assurance of a quality product with guaranteed dependable results.



THE DAVIES-YOUNG SOAP COMPANY

William Moore Dies

William Moore, for many years manager of the Chicago branch of Dodge & Olcott, Inc., New York, died recently in Bradenton, Fla., where he made his home following his retirement from D&O in the Thirties.

Tidy House Names Corson

Appointment of Barney Corson as director of merchandising was announced recently by Tidy House Products Co., Shenandoah, Ia. He has served as sales promotion manager and director of market development and has been a member of the board since 1950. In his new capacity he will contact chain and cooperative groups in the food field in developing the merchandising efforts of the firm, and will also coordinate advertising and sales. The Tidy house line of "Perfex Super Cleaner," "Dexol Powder Bleach," "Glosstex Liquid Starch" and "Shina Dish Detergent" now has distribution from the Rockies to the east coast, and is currently planning to add new metropolitan markets.

Hooker Fills Sales Posts

Five new positions in its sales department were announced recently by Hooker Electrochemical Co., Niagara Falls, N. Y. Frederick W. Bonacker, Jr. and Gregory J. Perreault have been placed in charge of technical correspondence in the technical service office. Victor M. Morgan and Julian J. Boyce have transferred to the product scheduling office; and Joseph A. Lenahan has been moved to sales records.

Scharwachter Arizona V.P.

Appointment of Albert Scharwachter as vice-president of Arizona Chemical Co., New York, was announced recently by International Paper Co. and American Cyanamid Co., New York. Arizona is owned jointly by the two companies.

Mr. Scharwachter had been associated with A. Klipstein & Co. for many years before it was acquired by Cyanamid in 1931, when he became a department manager in Cyanamid's industrial chemicals division. He has been active in the tall oil business since

Arizona began production of the product in 1946. He was recently reelected president of the Tall Oil Assn., and has served on several advisory committees during World War II.

Davison in Stock Transfer

W. R. Grace & Co., international trading and industrial organization, announced recently it would exchange 75,218 shares of its common stock for \$1,875 shares of the common stock of Davison Chemical Corp., Baltimore. The latter stock is owned by two investment companies-Investors Stock Fund and Investors Mutual, both of which are affiliated with Investors Diversified Services of Minneapolis. When the exchange of shares is effected, Grace will own 234,369 shares, or 29.2 percent, of Davison's outstanding common stock. It also owns 24,280 shares, or 18.9 percent of Davison's preferred stock.

Opens Fats, Oils Office

T. F. McAdam recently opened a brokerage office at the Produce Exchange Building, 2 Broadway, New York, to deal in chemicals, oils, fats, and waxes.

Distributors Get Charter

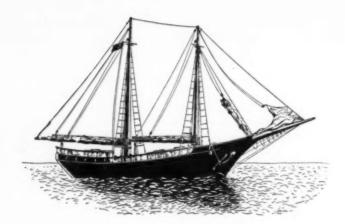
Aldor Distributors, Inc., New York, have recently been incorporated in the State of New York as dealers of soap and detergent products, listing capital stock of 200 shares no par value. Directors of the new firm are given as: Margaret Garcia, Ruth Kaaplander and Mitchell B. Booth, all of 36 West 44th St., New York. Rudolph Birnbaum of 36 West 44th St., New York filed the papers.

Sanitation Clinics

Plans for a nation-wide program of one day sanitation cost control clinics, organized for the purpose of bringing improved methods and ideas to sanitation administrators on the subject of "Lowering Costs in Floor Cleaning," were announced recently by Mohe H. Solworth, supervisor of the clinics. The program is designed for institutions interested in sanitation control methods at reduced costs. The national schedule for the one day clinics begins Oct. 5 in Louisville, Ky., and terminates in Richmond on Feb. 26. The attendance at each one day clinic is limited to 100 registrants.

The first of a series of regional and field managers conferences to be held since the recent reorganization of the field management staff of E. R. Squibb & Sons Co., New York, took place recently at the Hotel Plaza, New York. Seated from left to right are: W. R. McHarque, vice-president; J. C. Leppart, president; J. J. Toohy, executive vice-president, and W. L. Arscott, vice-president. Standing in the same order are regional sales managers: John Chervenak, New York; Rease Inge, Atlanta; Paul A. Freeman, Chicago; O. J. Phillips, Philadelphia; Frank A. Chattfield, Cleveland; and Arthur M. Covell, Boston.





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CHECK YOUR NEEDS

VEGETABLE OILS

Babassu Olive
Castor Palm
Cocoanut Peanut
Corn Sesame

ANIMAL FATS

Sperm Oil Grosse
Oleo Stearine Tallow
Lard Oil Lanolin
Neatsfoot Oil

FATTY ACIDS

Tallow

Red Oil Tall Oil
Stearic Acid
Hydrogenated Fatty Acid
Cottonseed and Soybean
Fatty Acids

ALKALIES

Caustic Soda, Solid, Liquid, and Flake
Soda Ash, Light and Dense
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hydrated
Calcium Chloride
Tri Sodium Phosphate
Tetra Pyro Phosphate
Quadrafos Granular and Beads—a stable
polyphosphate for water conditioning and
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Soapers have depended on WH&C ... for Raw Materials of Quality

SINCE 1838, we've been supplying the nation's "soapers" with basic raw materials.

SILICATE OF SODA—Liquid powdered and solid.

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METSO* DETERGENTS-55, 66, 99.

MAYPONS—Unique surface active agents; prolific foam; high detergency and emulsifying powders; suitable for cosmetic and industrial use.

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Let us mix your dry private formulas

Established 1838

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NEW YORK 14, N. Y.

Warehouses in New York and Newark, N. J.

Plant Show to Chicago

The Plant Maintenance Show will move to Chicago for the 1954 exposition, it was announced recently by Clapp & Poliak, Inc., New York, producers of the exposition. At the same time, it was disclosed that the name will be changed to the Plant Maintenance and Engineering Show. The exposition will be held at the International Amphitheatre, Chicago, Jan. 25-28, inclusive. Concurrently with the show, the Plant Maintenance and Engineering Conference will be held at the Conrad Hilton Hotel.

Girdler Names Huber

Appointment of Harold E. Huber as a member of the technical sales department of its Votator division, was announced recently by John E. Slaughter, Jr., vice-president of Girdler Co., Louisville, Ky. Mr. Huber started with Standard Oil Co. of Indiana, in 1938. He was engaged in exploratory research and pilot plant work before joining Girdler in 1943. Prior to being elevated to his present position he was chief process engineer of the Votator division. He received

B.S. and M.S. degrees from the University of Louisville.

Hooker Assigns Four

Four new men have been added to the research department of Hooker Electrochemical Co., Niagara Falls, N. Y., Dr. J. H. Bruun, director of research, announced recently. Dr. Edward D. Weil has been assigned to the process research group; Dr. George C. Schweiker and Finn Claudi-Magnussen have been named to the resins and plastics research group; and Richard G. Gardella was appointed as a chemical engineer to the pilot plant group.

June Fatty Acid Output Off

Production of fatty acids in June, 1953 totalled 32.7 million pounds, somewhat below the May level, and slightly higher than the June, 1952 figure, the Association of American Soap & Glycerine Producers reported recently. Total disposition was 33 million pounds, slightly below the May total, but above the June, '52 level of 30.6 million pounds. Stocks increased over the May level to somewhat more than 36 million pounds.

New Tussy Representatives

Two new appointments to its sales staff were announced recently by Tussy Cosmetiques, New York. Lorraine Robin, who formerly was a traveling representative for Tussy, was appointed assistant sales representative to Leonard Weiss in Georgia. Madeline Leib, who previously was with Helena Rubenstein and Elizabeth Arden, was named assistant sales representative for Florida, under Mr. Weiss.

Jensen Legion Commander

Election of A. R. Jensen, midwestern head of Magnus, Mabee & Reynard, Inc., New York, to command the Chicago Retail Druggist American Legion Post 575, for the year to come, was announced recently by the essential oil firm.

Siegel Convalescing

Milton H. Siegel, manufacturers representative in Baltimore, has recently been hospitalized for major surgery, and now is convalescing at his home. He plans to resume his regular business trips as soon as his health permits.

Emery Shifts Sales Staff

Appointment of district sales managers of the chemical sales division was announced recently by Emery Industries, Inc., Cincinnati. James W. Ritz, who was head of the Philadelphia office, now becomes eastern district manager. He retains his Philadelphia headquarters extending its coverage to include New Jersey, Delaware, Maryland, District of Columbia and por-

tions of Pennsylvania and New York. Willard A. Colby becomes the southern district manager, with offices in Charlotte, N. C. He is in charge of all chemical sales in Virginia, North Carolina, South Carolina, Florida, Tennessee, Georgia, Alabama and Mississippi. Two new men have been assigned to this district: E. W. Sack, formerly a production supervisor with Emery at Cincinnati, and C. T. Burgess, who re-

places J. P. Clancy, recently transferred to Boston.

Harry D. Armitage continues at his present location in New York City as district manager at large.

In addition, N. F. Reinert has been shifted from Chicago to the eastern district. He has been replaced by W. J. Ryan, formerly associated with the Barrett Division of Allied Chemical and Dye Corp., New York.

JAMES W. RITZ



W. A. COLBY



HARRY ARMITAGE







HOW
CAN
POTASSIUM
SILICATES
HELP
YOU?



Let us send the supporting details on Kasil detergent values. Ask for publication, "Potassium Silicates in Soaps." For liquid or paste potash soaps, Kasil Potassium Silicates are efficient detergent allies. They increase the sudsing ability of these soaps, they effectively suspend soil, and then prevent the re-deposition of removed soil. Unlike sodium silicates the use of Kasil builders in liquid or soft paste soaps does not materially alter their viscosity.

In sodium soap, the addition of Kasil Potassium Silicate partially converts it into a potash soap. Increased solubility and rate of solution as well as improved sudsing result without the possibility of salting out.



PQ Silicates of Soda

PHILADELPHIA QUARTZ COMPANY 1152 Public Ledger Bldg., Philadelphia 6, Pa.

"Surf" on Billboards

Lever Brothers Co., New York, recently announced that it has launched a three-months campaign of outdoor advertising for "Surf." The venture into outdoor and billboard advertising is a departure from "Surf's" past pattern which focussed largely on radio and television advertising. The campaign, which stresses a new theme—"smell like sunshine," is appearing in 400 major markets.

GAF Ups Hilldring

Appointment of John H. Hill-dring as senior vice-president of General Aniline & Film Corp., New York, was announced following a recent meeting of the firm's board of directors. He first became associated with General Aniline as a consultant on foreign trade in 1947, and in 1950 he became general manager of foreign operations for both General Aniline and General Dyestuff Corp., the sales outlet for GAF chemicals. He was responsible for the firm's export and import operations.

Drops Charges Against C-P-P

Charges of interlocking directorates against Colgate-Palmolive-Peet Co., Jersey City, N. J., Vick Chemical Co., New York, and seven other companies were dismissed recently by the Federal Trade Commission, Washington, D. C. The complaints were dropped after the F.T.C. noted that the common directors had given up their posts.

Continued Fats Surplus

Surplus production of fats and vegetable oils will continue in the U.S. through at least 1954 unless crop weather is adverse, according to E. K. Scheiter, executive vice-president of A. E. Staley Manufacturing Co., Decatur, Ill. Reporting on the U. S. fats and oils situation at the annual Congress of the International Association of Seed Crushers, held recently at Scheveningen, Holland, Mr. Scheiter said the reason for the continuing increase in the U. S. carryover of fats and oils is embedded deeply in its economy and recent political history. The U. S. carryover of edible fats and

oils should reach 1.6 billion pounds by Sept. 30, the end of the crop year, Mr. Scheiter said. This is 84 per cent higher than last year, Mr. Scheiter reported. The carryover of the inedible crop is expected to rise about 20 per cent, he said. Approximately two-thirds of the edible carryover is held by the U. S. Government, according to Mr. Scheiter.

Adopts 'Repack' Idea

Drexel Laboratories, Philadelphia, recently announced that it has adopted the suggestion of the National Wholesale Druggists' Assn. to use a special label for mixed shipments bearing the statement "Repack—Contains Assorted Merchandise." The Drexel firm, maker of "Wonder" soap, has also standardized shipments to one, two, and four-dozen packs.

Lever Buys Most Space

Biggest toiletry advertiser in newspapers during 1952 was Lever Brothers Co., New York, with an expenditure of \$12,878,250, for an increase of 11.6 per cent over 1951. Lever was second among the top 100 national newspaper advertisers. Procter & Gamble Co., Cincinnati, dropped to eighth place with \$7,973,507 spent for newspaper advertising in 1952, a decrease of 43.8 per cent. Next after Lever, both in the toilet goods field and the overall ranking, came Colgate-Palmolve-Peet Co., Jersey City, N. J., which moved up from fifth place in 1951 with an 11.5 per cent increase in newspaper expenditures to bring its total for the medium to \$12,088,261.

Others in the soap and sanitary chemicals field who placed within the top 100 national newspaper advertisers in 1952 were as follows:

New Revion Subsidiary

Expanding global operations have resulted in formation of a new subsidiary unit, Revlon World Wide Corp., it was announced recently by Charles Revson, president of Revlon Products Corp., New York. The new unit handles Western Hemisphere business, mainly in Latin America and Canada. At the same time, the firm announced that Edmund F. Buryan has been appointed general manager of the new company. W. Tyrie Stevens, formerly stationed in Havana, Cuba, has been appointed a regional sales manager for the new unit, with headquarters in Bogota, Colombia. Joseph Singer, formerly in the New York office, has been appointed branch manager in Cuba, while Joseph Buenaga has been transferred to Central America from Puerto Rico, with Monte Smith replacing Mr. Buenaga in Puerto Rico. Harold Judelson has been transferred from Rio de Janeiro, Brazil, and made a market manager in New York for the new unit.

Diamond Names Beeson

Appointment of William B. Beeson, Jr., as sales manager of its new subsidiary, Belle Alkali Co., Belle, W. Va., was announced recently by Diamond Alkali Co., Cleveland. Mr. Beeson is located in the Cleveland headquarters of the company. Originally assigned to Diamond's Cincinnati branch sales office in 1933, he was transferred in March 1948 to the company's Pittsburgh branch office, where shortly thereafter he was named assistant branch manager. He received an A.B. degree in 1932 from Washington and Jefferson College, Washington,

Company	1952 Expenditure	Rank 1952	1951 Expenditure	% Change	1951 Rank	
American Home						
Products Corp.	\$2,030,730	27	\$2,816,212	27.9	18	
Armour & Co.	1,924,859	29	1,995,095	- 3.8	28	
Sinclair Refin-						
ing Co.	1,330,824	52	1,136,399	+17.1	63	
Beacon Co.	1,088,152	66	694,143	+56.8	-	
Noxzema Chemical						
Co.	1,040,412	73	752,815	+38.2	*******	
S. C. Johnson & Son,						
Inc.	948,419	85	1,566,059	-39.4	42	
Simoniz Co.	947,211	86	754,128	+25.6	-	
Warner-Hudnut, Inc.	892,534	90	275,782	+223.6		
Mennen Co.	855,388	94	311,647	+174.5		
Clorox Chemical Co.	852,201	95	719,816	+18.3	4000	
Plough, Inc.	806,617	100	915,167	11.9	76	

LET THESE ODOR EXPERTS COMPOUND THE FRAGRANCE FOR YOUR...



TOILET SOAPS

IF ODOR makes an important difference in the acceptance and sale of a toilet soap and you know that it does then the obvious answer to many a soap manufacturer's sales problem is just this: USE BETTER PERFUMES. This does not mean, necessarily, costlier perfumes, but rather a more expert compounding and blending of aromatics. Now the skilled perfumer who holds the key to this problem possesses a rare and costly commodity. We are fortunate in having on our staff not one, but a whole team of experts whose combined knowledge covers every aspect of perfuming from basic raw material manufacture to finished product. Few firms can boast or buy such experience, yet to every toilet soap manufacturer the experience and creative abilities of this great staff are always available — at no extra cost to help each find a better perfume and the right answer to his selling problem.

ALSO

PERFUME

SPECIALTIES

FOR:

AEROSOLS

CLEANING COMPOUNDS

DEODORANTS

DISINFECTANTS

FORMALDEHYDE SPRAYS

HOUSEHOLD SPRAYS

INSECTICIDES

LAUNDRY SOAPS

LIQUID SOAPS

PARA BLOCKS

POLISHES

SCOURING POWDERS

SHAMPOOS

ETC.

FRITZSCHE Established 1871

Stockhers, Onc.

PORT AUTHORITY BUILDING, 76 NINTH AVENUE, NEW YORK 11, N. Y.

BRANCH OFFICES and "STOCKS: Atlanta, Georgia, Boston, Massachusetts, "Chicago, Illinois, Cincinnati, Obio, Cleveland, Obio, "Los Angeles, California, Philadelphia, Punnsylvania, San Francisco, California, St. Louis, Missouri, "Toronto, Canada and "Mexico, D. F. FACTORY: Clifton, N. J.

Soap Tax Off 100 Years

Great Britain celebrates this year the first 100 years in which the government has not imposed a special tax on the sale of soap. This memorable event received recognition recently in an article appearing in the Times, of London. The Times' article stated:

"It has been 100 years since the duty on soap was remitted in England. In abolishing it, Gladstone, in his 1853 and first budget, closed a vexatious history of 222 years. By 1631 there had been three centuries of commercial soapmaking in England. In the reign of Elizabeth I soap houses congregated chiefly around Bankside, where Shakespeare played. Charles I found the trade well entrenched, and its practitioners proud of their craft.

"The monarch was pressed for money to meet domestic engagements and support continental wars. He resorted to the granting of monopolies for raising revenue. In 1631 the 'washbowl' recommended itself to Charles as a handy and docile agency of replenishment. He granted to certain unpracticed gentlemen of Westminister a charter for the exclusive manufacture of 'their new white soap.' It was decreed that no other soap should be used, upon condition that he should be paid four pounds a ton' on 5,000 tons a year.

a year.

"The monopoly of soap,' wrote Cromwell, 'was very grievous to men. Your soap was dear and it would not wash, but only blister.' In 1637, having 'vexed the whole kingdom with their white soap,' the Westminster gentlemen surrendered their patent for 40,000 pounds. The authentic tradesmen were then incorporated, having agreed to pay eight pounds a ton on soap made. In three years the impost yielded 90,000 pounds. The abolition of the soap duty was the first remission of taxation proposed by Gladstone on April 18, 1853. He spoke for five hours. It was impossible to deny, he said, that there were great evils connected with the tax. It encouraged fraud. It was injurious to the comfort and health of the people. The remission took effect July 5. From 1853 trade in soap remained free from state interference until Feb. 8, 1942, when soap rationing was announced. The return to freedom came in September, 1950."

Columbia-So. Names Dyer

Appointment of Brooks M. Dyer as assistant director of sales for Columbia-Southern Chemical Corp., Pittsburgh, has recently been announced by W. I. Galliher, vice-president. Associated with the company since 1943, Mr. Dyer previously served as district sales manager at St. Louis and as assistant district manager at Philadelphia. He is a graduate of Boston University. His headquarters are at the firm's general offices in Pittsburgh. At the same time, the

company announced that it has appointed William Carpenter as acting district sales manager at St. Louis. He is a graduate of Carnegie Institute of Technology.

NLRB Upholds P&G

A trial examiner's report clearing Procter & Gamble Co., Cincinnati, of charges of unfair labor practices in its manufacturing plant at Dallas, has recently been upheld by the National Labor Relations Board, Washington, D. C. This action clears the firm of charges brought by Oil Workers International Union, CIO, in a complaint filed with NLRB Sept. 23, 1951, that the company refused to bargain with the union.

Fatty Acids Stocks Up

Production of fatty acids in May 1953 totalled over 36 million pounds, slightly above the April level, and some 10 percent over the May 1952 figure, according to figures of 19 reporting manufacturers, the Association of American Soap & Glycerine Producers, announced recently. Total disposition was 35 million pounds, slightly below the April total, but above the May 1952 32 million level. Stocks increased over the April level to somewhat more than 35 million pounds.

Total stocks (in thousand pounds) were as follows: Stearic acid, 40 to 50 percent stearic content, 4,787; other stearic acids, and high palmitic, 5,162; hydrogenated fish & marine mammal, 626; lauric type acids, other saturated, 1,581; oleic acid, 10,776; animal fatty acids, 5,330; vegetable or marine fatty acids, unsaturated fatty acids—I.V.116 to 130, unsaturated fatty acids—I.V. over 130, 5,961.

Total disposition (in thousand pounds) was: stearic acid, 40 to 50 percent stearic content, 4,659; other stearic acids, 7,955; high palmitic, 415; hydrogenated fish and marine mammal, 1,668; lauric type acids, 1.517; other saturated, 984; oleic acid, 8,093; animal fatty acids, 2,109; vegetable marine fatty acids, 2,265; ensaturated fatty acids—I.V.116 to 130, 2,759; unsaturated fatty acids—I.V. over 130, 17,932.

New C-P-P, Ltd. Addition

Colgate-Palmolive-Peet, Ltd., has announced recently that it awarded a contract for the erection of a seven-story addition to its present factory building at 64 Colgate Ave., Toronto. The \$1,500,000 extension is expected to be completed by the end of 1953. Most of the new 90,000 square feet of floor space will be used for manufacturing purposes, while the seventh floor will provide additional office space. Some 1,000 persons are now employed at the plant.

Tallow Research Fellow

Appointment of Dr. Leonard S. Silbert as senior fellow under a multiple fellowship recently established by the National Renderer's Assn. at the U. S. Bureau of Agricultural and Industrial Chemistry's Eastern Laboratory in Wyndmoor, Pa., was announced recently by Dr. P. A. Wells, laboratory director and Frank B. Wise, secretarytreasurer of the association. Mr. Wise announced that the multiple fellowship is part of a new research program being initiated by the association to find new uses for inedible tallow and grease. Dr. Silbert is working under the general direction of Dr. Waldo C. Ault, head of the laboratory's animal fats division.

ACHEMA to Meet in '55

The Chemical Engineering and Equipment Exhibition, known as ACHEMA XI, will be held in Frankfurt am Main from May 14 to May 22, 1955, it was announced after a recent meeting of the Dechema board of management.

Lever Ups Wood

J. R. Wood, formerly brand merchandising manager in the Lever division of Lever Brothers Co., New York, has been named assistant field sales manager, it was announced recently by Raymond F. Underwood, general sales manager. Mr. Wood, who has been with Lever for 23 years, was also sales training manager in the Lever division. He was graduated from Harvard College in 1925 and from Harvard Graduate School of Business Administration in 1928.

When men make a hit with it



Norda helps

The quality a perfume has is the quality it starts with. Norda creates perfume compounds that are basic to high class perfumes.

Leading perfume makers depend on Norda. Many a subtly blended fragrance and alluring, elusive odor have Norda knowledge to thank. Experience, care, and very great pride are advantages Norda offers. Norda has always made good selling scents. Send for free Norda samples today.

Norda ESSENTIAL OIL & CHEMICAL COMPANY, INC. 601 West 26th Street, New York 1, N. Y.



How to pull profits out of a pail

Maintenance and supply men like Armour's dishwashing, car washing, rug cleaning and general maintenance products so well that converters make lots of money by just repackaging them. They don't do anything else to them.

And jobbers find that they can sell Armour soaps and synthetics without pushing or "hard selling." So they make money, too, by handling Armour's line of improved maintenance products.

Everybody pulls profits out of the common scrub-bucket.

Maintenance products

Do-All Synthetic Detergent. An all-purpose anionic with high suds stability, Do-All is already built. It can be used for hand dishwashing, maintenance, rug cleaning, etc. You can also use it to compound more specialized products.

Regal Synthetic Detergent Beads. Very stable under acid or alkaline conditions, Regal is a versatile anionic alkyl aryl sulfonate with high wetting, penetrating and detergent properties. It can be used for almost any industrial job from dishwashing to car washing.

There's profit in Armour hand soaps, too

Here Armour offers you the base for compounding superior hand soaps. With **Powdered Dial** and **Arconomy Powder** you can make a soap for any institution or industrial plant.

Where germicidal protection is required—in hospitals, heavy industrial plants—use *Powdered Dial*. Perfect for compounding hand soaps or for repackaging as is, *Powdered Dial* is Armour's famous bath and toilet soap in powdered form. It provides Hexachlorophene protection—and that makes it popular with industrial users and institutions.

For light factory and office work, we recommend Arconomy Powder. This is powdered Dial without Hexachlorophene. Arconomy is a 20% coconut oil soap (instead of the usual 5 to 15%) assuring fast and copious suds in powdered hand soaps. It's great for dispenser use, as is or compounded. Write to Armour today for further information on these and the rest of our complete line.

ARMOUR

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Industrial Soap Department

Armour and Company • 1355 West 31st Street • Chicago 9, Illinois



...your product wins consumer support

RIGHT HERE

...where a GIVAUDAN odor is your star salesman

Unpleasant detergent odor can effectively block the way to repeat sales, while a pleasantly perfumed product brings the customers back for more.

For a truly appealing product odor, see GIVAUDAN, where you command the services of specialists thoroughly experienced in the successful perfuming of every type of cleansing product.

We welcome your inquiries on any matters concerning odor.

Givaudan-Delawanna

Leaders In Creative Perfumery
330 West 42nd Street, New York 36, N. Y.

Branches: Philadelphia • Boston • Cincinnati • Detroit
Chicago • Seattle • Los Angeles • Toronto

Bids and AWARDS

Shell Bids on Aldrin

Nineteen hundred and eighty-five gallons of aldrin insecticide were included in a recent opening for miscellaneous supplies by the Federal Supply Service, Washington, D. C. Low bids were submitted by Shell Chemical Corp., Denver, as follows: \$4.41, f.o.b. Denver; \$4.71, f.a.s. San Francisco or New York City; \$4.62, f.a.s. New Orleans, Houston, Tex.

FSS Award

On 18,000 pounds of dishwashing compound, included in a recent opening for miscellaneous supplies by the Federal Supply Service, Washington, D. C., the award went to Washington Chemical Sales Co. with a bid of 7.5 cents per pound.

Maxwell Successful Bidder

In a recent opening for miscellaneous supplies by the Engineers Corps, Norfolk, Va., the award on 8,000 pounds of dichloro-diphenyltrichloroethane was won by Maxwell Insecticide Co., Raleigh, N. C., with a bid of 23 cents per pound.

DDT Solvent Award

Socony-Vacuum Oil Co., Baltimore, Md., won the award on 4,000 gallons of trimethylated naphthalene solvent for DDT, in a recent opening for miscellaneous supplies by the Engineer Corps, Norfolk, Va.

QM Wax Award to Tesco

In a recent opening for miscellaneous supplies by the Quartermaster, Fort Benning, Ga., Tesco Chemical Co., Atlanta, won the award on 6,000 gallons of water emulsion floor wax with a bid of 48.5 cents.

QM Cleaner Awards

In a recent opening for miscellaneous supplies by the Quartermaster Purchasing Office, New York, the award on dishwashing compound, type one (item one) and on bread baking pan cleaning compound (item two) went to the following bidders: Cowles Chemical Co., Cleveland, item two, 951,000 pounds, 6.66 cents to 6.72 cents, total \$63,612.60; Clarkson Laboratories, Philadelphia, item two, 235,000 pounds, 6.66 cents, item one 3,450 pounds, 6.49 cents to 6.99 cents, total \$15,820.06; Turco Products, Inc., Los Angeles, item one, 3,863 pounds, 7.19 cents to 8.2 cents, total \$289.86.

QM Soap Awards

A recent opening for miscellaneous supplies by the Quartermaster, New York, included ordinary issue soap. The following firms were successful bidders: Mt. Hood Soap Co., Portland, Ore., 1,000,000 bars, 4.98 cents, total \$49,800; National Soap & Chemical Co., Tacoma, Wash., 2,000,000 bars, 5.34 cents, total \$106,800; North Coast Chemical & Soap Works, Seattle, 167,000 bars, 6.16 cents, total \$10,287.20; Gillam Soap Works, Fort Worth, Texas, 200,-000 bars, 4.7 cents, total \$9,400; Standard Soap Company of Camden, Camden, N. J., 289,000 bars, 4.2 cents to 4.76 cents, total \$13,682.40; Fitzpatrick Bros., Chicago, 250,000 bars, 3.98 cents, total \$9,950; Colgate-Palmolive-Peet Co., Jersey City, N. J., 9,874,000 bars, 3.533 cents to 4.783 cents, total \$416,466.98; Haskins Bros. Co., Omaha, Neb., 3,750,000 bars, 3.43 cents to 3.89 cents, total \$138,837; West Coast Soap Co., Oakland, Calif., 80,000 bars, 5.89 cents total \$4,712; Stahl Soap Corp., Brooklyn, 1,500,000 bars, 3.62 cents, total \$54,300.

FSS Cleaner Awards

In a recent opening for miscellaneous cleaning supplies by the Federal Supply Service, Seattle, the following firms received awards: Pacific Chemical Manufacturing Co., Seattle, one 55 gallon drum of phenolic multipurpose cleaner, \$48.50; Janco Supply Co., Seattle, five five-gallon cans of rug and upholstery cleaner, \$10.50; North Coast Chemical & Soap Works, 600 gallons of liquid window cleaner,

83 cents; L. H. Butcher Co., Seattle, 500 50-pound bags of oil absorbent, \$1.70, 3,000 pounds dishwashing compound \$7.95 C, and 9,000 pounds of same, \$7.39; West Disinfecting Co., Long Island City, N. Y., 2,000 cans of liquid toilet soap, 66.25 cents; Pacific Coast Borax Co., Los Angeles, 2,100 cartons of borax soap powder, 40 cents, and 600 cartons of soap powder, 63 cents; Western Compound Co., Seattle, sweeping compound, 1,000 containers, \$2.35 each, and 300 drums, \$4.50 each.

In another opening by the same office, awards went to Commission Co., Seattle, 6,000 22-ounce cans of toilet bowl cleaner, 17.4 cents; Cosmopolitan Products Co., Los Angeles, 72 one-gallon jars of hand cleaner, \$2.10; North Coast Chemical & Soap Works, Seattle, 144 gallon cans furniture polish, 88 cents, and 14 2-pound drums of soap paste, 13.8 cents per pound; Orford Soap Co., Manchester, Conn., 3,200 cakes of grit soap, 4.4513 cents; Newell Gutradt Co., San Francisco, 72 cases of grit soap, \$4.50.

FSS Deodorant Bid

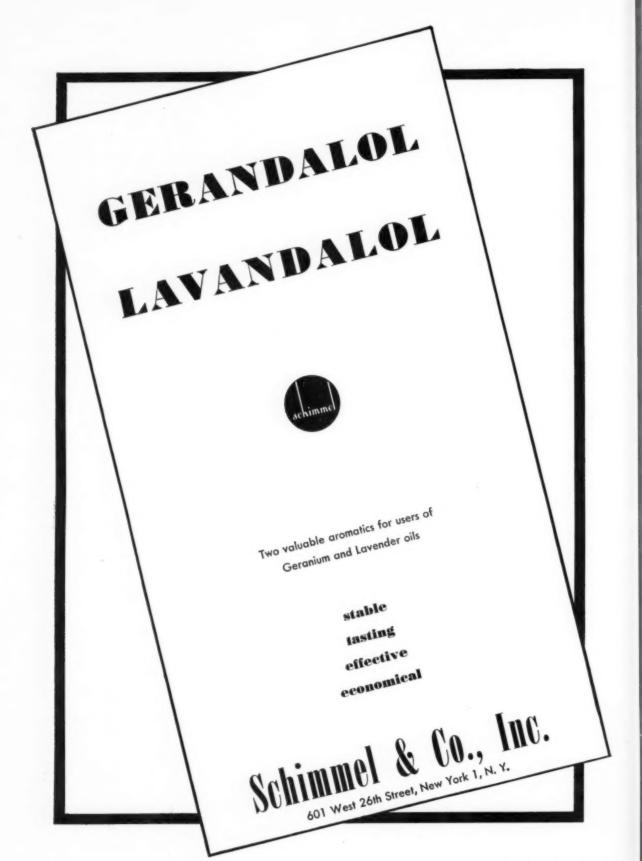
In a recent opening for miscellaneous supplies by the Federal Supply Service, New York, the low bid of 5.2 cents on deodorant blocks was submitted by A. M. R. Chemical Co., Brooklyn, N. Y.

QM Award to Helene Curtis

A recent opening for miscellaneous supplies by the Quartermaster Purchasing Office, New York, include chlorine disinfectant, food service 3.35 ounce packages. The award went to Helene Curtis Industries, Chicago, 182,688 packages, \$.266864, total \$48,752.85.

Sweep Compound Awards

Sunshine Broom & Brush Co., Cleveland, submitted the low bid of 2.25 cents on sweeping compound, included in a recent opening for miscellaneous supplies by the Federal Supply Service, Chicago. In another opening for sweeping compound by the same agency, Union Paper & Twine Co. won the award with a bid of \$2.46.



NEW Erade Marks

THE following trade marks were published in recent issues of the Official Gazette of the U. S. Patent Office in compliance with section 12(a) of the Trade Mark Act of 1946. Notice of opposition under section 13 may be filed within 30 days of publication in the Gazette. See rules 20.1 to 20.5. As provided by section 31 of the Act, a fee of \$25 must accompany notice of opposition.

D-S Regoes-This for detergent in powder form. Filed Sept. 10, 1952 by Rigo Manufacturing Co., Nashville, Tenn. Claims use since Dec. 1, 1950.

Sof-Foam-This for baby oil shampoo. Filed Oct. 14, 1952 by "4711" Limited, Beverly Hills, Calif. Claims

use since Sept. 12, 1952.

Seven Seas—This for shampoo. Filed Nov. 18, 1952 by Rayette, Inc., St. Paul, Minn. Claims use since Oct. 7, 1946.

Sanavene-This for rug cleaner. Filed Dec. 8, 1952 by Sanavene Mfg. Co., St. Louis. Claims use since July 25, 1934.

"Grip - Step" -This for self polishing floor wax. Filed Mar. 1, 1951 by Lien Chemical Co., Franklin Park, Ill. Claims use since July 18, 1947.

El-Bo-Ez-This for polishing powder for use on wax surfaces. Filed Oct. 28, 1952 by El-Bo-Ez Co., Skaneateles, N. Y. Claims use since Oct. 18, 1952.

Termi-tox-This for extermination and prevention of termites and insects. Filed Oct. 26, 1951 by Gordon Chemical Co., Kansas City, Mo. Claims

use since Aug. 1, 1939.

Regal—This for room deodorant. Filed Dec. 18, 1951 by Galree Products Co., New York. Claims use since Nov. 16, 1951.

Galco—This for insecticides. Filed Dec. 27, 1951 by Galree Products Co., New York. Claims use since Dec. 12, 1951.

3-Way-This for room deodorant. Filed Dec. 18, 1951 by Reefer-Galler, Inc., New York. Claims use since Nov. 16, 1951.

Bug Nix-This for pest control pads. Filed June 2, 1952 by V. S. Babcock Sales Co., San Francisco. Claims use since Apr. 29, 1952.

Baton-This for shaving soap. Filed Dec. 3, 1951 by Sears, Roebuck and Co., Chicago. Claims use since June 25, 1951.

- This for shaving Swank cream. Filed Apr. 17, 1952 by Bostwick Laboratories, Inc., Bridgeport, Conn. Claims use since Apr. 11, 1951.

Clienco-This for powdered hand soap. Filed Mar. 1, 1951 by Lien Chemical Co., Franklin Park, Ill. Claims use since July 28, 1947.

Stan-Ban-This for liquid cleaning disinfectant. Filed May 20, 1952 by Stanley Home Products, Inc., Westfield, Mass. Claims use since Feb. 26,

Naptone-This for detergent. Filed June 6, 1952 by E. F. Drew & Co., New York. Claims use since Dec. 11, 1951.

Dana-This for toilet soaps. Filed Aug. 21, 1952 by Les Parfums de Dana, Inc., New York. Claims use since 1933.

Nu-klenz-This for liquid soap. Filed Sept. 22, 1952 by Manufacturing Laboratories, Inc., Boston. Claims use since Nov. 19, 1928.

Charles Antell-This for sham-Filed Oct. 17, 1952 by Charles Antell, Inc., Baltimore. Claims use since July 20, 1950.

Arist - O - Creme - This for cream shampoo and a liquid-cream shampoo. Filed Nov. 18, 1952 by Argie Brian Cosmetics, Washington, D. C. Claims use since Nov. 10, 1952.

Tigress-This for soap. Filed Dec. 30, 1952 by Faberge, Inc., New York. Claims use since September,

Gale-This for detergent. Filed Jan. 5, 1953 by Paulen Chemical Co., Berwyn, Md. Claims use since March, 1952.

Lanorica-This for shampoo. Filed Feb. 20, 1953 by Consolidated Cosmetics, Chicago. Claims use since Dec. 26, 1952.

Lactopine-This for toilet soap. Filed Feb. 20, 1953 by Swiss Pine Importing Co., New York. Claims use since 1936.

Tetrapol-This for solvents and detergents for use in spot-washing of textiles. Filed Feb. 26, 1953 by General Dyestuff Corp., New York. Claims use since Mar. 10, 1926.

Trol-This for shampoo. Filed Mar. 3, 1953 by Odell Co., Newark, N. J. Claims use since September,

Kensweep - This for floor sweeping composition with polishing properties. Filed Dec. 8, 1952 by Kentile, Inc., Brooklyn. Claims use since Jan. 23, 1940.

Jubilee-This for cleaning and polishing preparation. Filed Mar. 11, 1953 by S. C. Johnson & Son, Inc., Racine, Wis. Claims use since on or before Jan. 1, 1934.

Dia-Glo-This for detergent for cleaning metal, porcelain and painted surfaces. Filed July 17, 1951 by Diadust Corp., Manhasset, N. Y. Claims use since June 15, 1951.

Betco — This for detergents. Filed Mar. 10, 1953 by Betco Corp., Toledo, O. Claims use since on or about May 1, 1950.

Vitri-glaze-This for automo-

bile polish and cleaner. Filed June 28, 1949 by Black and Decker Manufacturing Co., Towson, Md. Claims use since May 15, 1949.

Keepa-Shine-This for metal polishing composition. Filed Jan. 30, 1952 by Kepec Chemical Corp., Milwaukee. Claims use since January,

Gala Bleach-This for powdered bleach. Filed Oct. 6, 1952 by Milner Products Co., Jackson, Miss. Claims use since Sept. 2, 1952.

Zoff-This for metal, tile, enamel and porcelain cleaner. Filed June 9, 1950 by Reaction Products Co., Richmond, Calif. Claims use since June 1, 1950.

O & W Compound-This for washing compound especially suited for scouring fabrics impregnated with grease. Filed Jan. 16, 1952 by Dia-mond Alkali Co., Cleveland. Claims use since Sept. 7, 1951. George—This for household cleaner. Filed Jan. 31, 1952 by Moore

Products Mfg. Co., Ames, Ia. Claims use since Dec. 15, 1951.

Aphrodisia - This for soap. Filed Nov. 21, 1952 by Faberge, Inc., New York. Claims use since September, 1951.

Protexall-This for spraying and dusting pesticidal composition. Filed Apr. 25, 1952 by Plant Products Corp., Blue Point, N. Y. Claims use since Feb. 5, 1946.

Sani-septic-This for cleaning compound for use in rinse water for sanitization of utensils. Filed Oct. 20, 1950 by Sani-Septic Chemical Co., Cleveland. Claims use since January,

Ansul "Dri-sol" - This for cleaning solvent for refrigeration equipment. Filed Nov. 24, 1952 by Ansul Chemical Co., Marinette, Wis. Claims use since July 11, 1952.

886—This for dry cleaning soap. Filed Mar. 12, 1953 by R. R. Street & Co., Chicago. Claims use since Feb. 10, 1953.

Glosuds-This for shampoo for rugs, walls, floors, clothing. Filed Mar. 24, 1953 by Globe Products of Florida, Inc., Clearwater, Fla. Claims use since Mar. 7, 1953.

Norsan-This for detergent for dishes. Filed Mar. 27, 1953 by Norsan Products, Inc., Cleveland. Claims use since June 1, 1948.

Cenol Moth Proof-This for moth destroyer and preventive. Filed June 20, 1952 by Cenol Co., Chicago. Claims use since July 1, 1932.

Formoclor-This for disinfectant. Filed Sept. 26, 1952 by Vince B. Nyhan Co., Chicago. Claims use since Nov. 29, 1921.

Rat Krax-This for preparation to kill rats. Filed Feb. 13, 1953 by Raymond H. Starr doing business as Koch Supplies, Kansas City, Mo. Claims use since Jan. 5, 1953.

Golden Harvest-This for liquid insecticides. Filed Mar. 27, 1953 by (Turn to Page 106)

KRANICH

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Liquid Castile Soap Shampoo Liquid Coconut Oil Soap Shampoo Liquid Olive Oil Soap Shampoo (50% Olive Oil Base)

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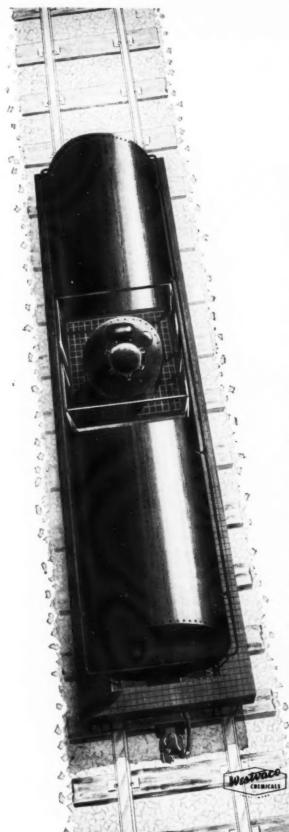
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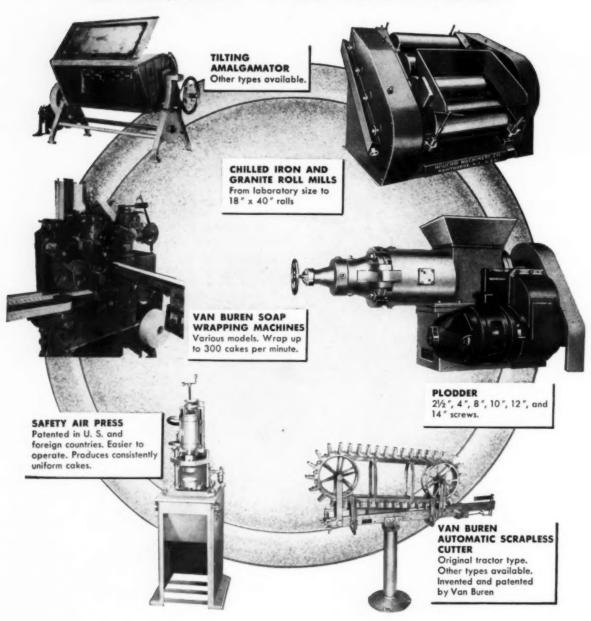


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Production SECTION

Spray Drying of Detergents

OST of the spray dried detergents produced are packaged for household consumption. The physical form of the finished product is one of the main reasons for spray drying. The type of spray drying employed varies depending upon the physical form desired in the finished detergent. In spray drying the particle size range and density must be controlled closely. This is best accomplished in a drier having the flow of air parallel to the fall of the product being dried. Drying may be accomplished with either con-current or counter-current air flow. But in either case the air flow should be non-turbulent and parallel to the fall of the product. It is virtually impossible to prepare a high quality product in good yields in driers having cyclonic air flow. This type of air flow tends to produce a rather large percentage of fine powder because of the tendency of the product in a cyclonic drier to hit the drier wall and shatter.

In order to produce relatively large, uniform detergent particles, it is necessary for them to have a free fall of approximately 30 to 60 feet in the spray drying tower. In order to keep turbulence low, the velocity of the air within the tower is usually in the range of 50 to 200 feet per minute. Such requirements call for a drying tower that is considerably taller than cyclonic driers, which may be used when physical form of the finished product is not an important factor.

Both con-current and countercurrent spray driers are being employed in drying detergents. The trend is toward the counter-current type, in which products of a density of 0.25 to 0.6 can be made, as against the operating range of the con-current drier in By Albert Sharphouse*

Ultra Chemical Works, Inc. Paterson, N. J.

which densities of the range of 0.1 to 0.35 are usual.

In spray drying the air is usually heated directly by mixing with the products of combustion of an oil or gas fired furnace. The inlet air temperature of a counter-current drier is of the order of 400° to 500°F. With the con-current type spray driers the inlet temperature range is approximately 500° to 700°F. The outlet temperature of the air in both units is around 200°F. Considerable care must be exercised in designing the air entrance and exit in order to have a uniform low turbulence flow of air without channeling.

It is advantageous to design the spray tower with an inlet fan and an exhaust fan. With the two fan systems, the tower can be operated at atmospheric pressure, thus simplifying the removal of the dried detergent from the tower. The most satisfactory units have a 60 degree lower cone, which permits the discharge of powder without the use of troublesome devices such as rakes, etc.

The separation of the finished product from the air is much more difficult in the con-current type tower. About the best method of separating

the air from the product in the counter-current unit is by utilizing a double cone at the bottom of the tower and drawing the spent air out of the tower between the inner and outer cones.

Most detergents' slurries are best atomized by a single fluid spray nozzle at pressures of from 200 to 500 pounds per square inch. The stock is best pumped with a triplex displacement pump which is not subject to the rapid wear of rotary or piston pumps.

The separation of the fines and dust from the exhaust air of the spray drying tower calls for careful study. Three methods of dust collection are most commonly used: the cyclonic collector, the bag filter and the wet scrubber. All three methods have their advantages and shortcomings. We believe the trend is toward wet collection.

Different formulas and different spray drying towers produce products of varying densities. However, the density, as well as the moisture content, of the finished product can be controlled very closely. The following factors influence the density: inlet air temperature, nozzle size, spraying pressure and exhaust air temperature. High inlet and outlet air temperatures produce low gravity products. Generally the higher the

The type of spray drying employed is closely related to the physical form desired in the finished product. Low air turbulence a must.

^{*} Paper presented before the 39th mid-year meeting Chemical Specialties Manufacturers Assn., Chicago, May 19, 1953.



MECCANICHE MODERNE

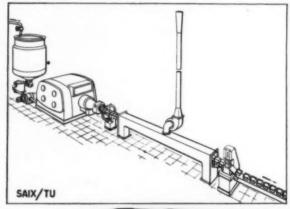
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PATENTED Cooling Extruder
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as well as with a T.F.M. content as
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From the saponification (molten hot soap) to the finished bars (cold solid soap) in a single stage without any

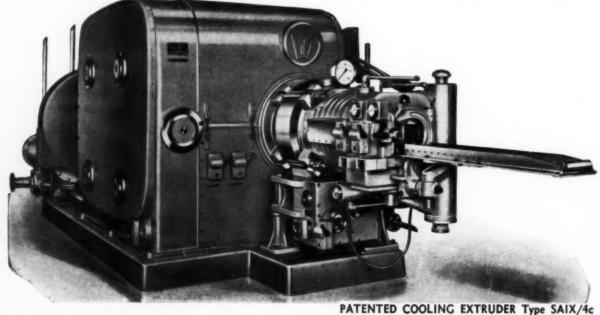




molten hot soap, it is possible to manufacture 72-73% T.F.M., soaps with an opaque, translucent or transparent appearance. The soap is continuously formed in bars of every desired size or in pellets for further milling procedure.

In this plant it also is possible to manufacture conventional or transparent toilet soaps without any formation of hard spots.

Type SAIX/1c, capacity $400 \div 500$ Kgrs. Type SAIX/2c, capacity $800 \div 1000$ Kgrs. Type SAIX/3c, capacity $1600 \div 2000$ Kgrs.



COOLING EXTRODER Type SAIN, TO

spraying pressure, the heavier and finer the dried product will be.

The amount of product that

can be dried per hour (water evaporated) is, of course, a function of the cubic feet of air handled and the useable heat content of this air, and this airflow and heat balance must be carefully calculated for a desired capacity.

pH and Titration Control

HE desirability and necessity for pH and titration control in washroom operations to control break suds operations are discussed in a recent issue of Washroom Digest, published by Diamond Alkali Co., Cleveland. After a brief description of the action of alkalies and acids in water, the pH value test is defined as a method of measuring the number of excess hydrogen or hydroxyl ions present in a solution in order to determine the strength of the acid or alkaline substance under review. Titration is described as a method of measuring the amount of an acid or alkaline substance that is furnishing the hydrogen or hydroxyl ions which have been measured by the pH value test.

There are several methods of measuring pH values of solutions. The colorimetric method uses dyes which turn a different color for each pH value in small sections of the scale. The most accurate pH measuring device is the potentiometer. It determines the hydrogen ion concentration electrically and reads directly on the pH scale of the instrument. In strongly alkaline and acid solutions, special electrodes must be used and corrections made in order to obtain accurate read-

Titrating is an operation to determine how much of an acid solution containing a known amount of acid is needed to neutralize an alkaline solution containing an unknown amount of alkali. In the case of acids of unknown concentrations, an alkaline solution containing a known amount of alkali is used. Dyes that change color very sharply when the neutralization point is reached are added to the solution to indicate the completion of the titration.

Phenolphthalein and methyl orange are commonly used as indicators

for titrating alkali solutions. The first gives a red color in alkali solutions which becomes colorless at pH 8.3 titrations is the total alkali in the soshow the inactive alkali in the solution. It is often possible to estimate the pH of a solution from the relation between the two titrations. All of the alkali in caustic soda is titrated by the first titration. Half of the alkali in soda ash is titrated by the first titration and half by the second titration, while all of the alkali in sodium bicarbonate is titrated by the second titra-

In the standard procedure, 25 c.c. samples of solutions from the washwheel are used for titration tests. The acid of known strength is either normal sulfuric or hydrochloric acid (49 grams/liter pure sulfuric acid or

while the latter turns from yellow to orange at pH 4.3. This method gives two neutralization points which are often called end-points. Since the pH of neutral soap is about 10.0, the amount of alkali in a solution above a pH of 8.3 is roughly the amount that is assisting the soap, while the amount below pH 8.3 and above 4.3 is acid to soap. The first end-point is often said to show the amount of active alkali in a solution while the sum of the two lution. The difference or the amount used in the second titration is said to

Table I

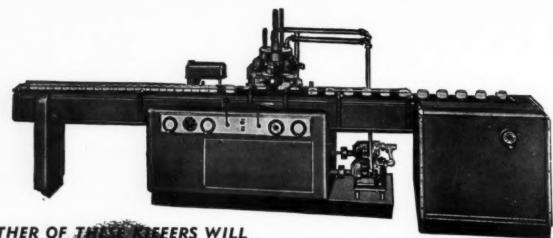
pH Value	OH Conc.*	pH Value	OH Conc.*		
9.5	.000032	10.8	.000630		
9.6	.000040	10.9	.008000		
9.7	.000050	11.0	.001000		
9.8	.000063	11.1	.001260		
9.9	.000080	11.2	.001580		
10.0	.000100	11.3	.002000		
10.1	.000126	11.4	.002500		
10.2	.000158	11.5	.003160		
10.3	.000200	11.6	.004000		
10.4	.000250	11.7	.005000		
10.5	.000316	11.8	.006300		
10.6	.000400	11.9	.008000		
10.7	.000500	12.0	.010000		

*Gram equivalents per liter.

36.47 grams/liter hydrochloric acid). While laboratories use burettes to measure acids or alkalies accurately in titrations, the drop method gives adequate accuracy for washroom control. A 25 c.c. sample of wash water is placed in a marked two-ounce bottle, a few drops of phenolphthalein indicator are added, and normal acid is added a drop at a time until the red color disappears. Next a few drops of methyl orange indicator are added to the solution and the titration is continued until the yellow color changes to an orange or red.

Soap alone in the washwheel does not wash cotton effectively and large amounts are needed to produce stable suds, because the 10 per cent alkali (Na.0) contained in soap is quickly used up by acidic materials in the load. Addition of alkaline builders with the same pH as soap (10.0) noticeably reduces soap consumption. Increase of pH from 10.0 up to 11.0 to 11.3 has been found to reduce soap consumption as much as 40 per cent while improving cleaning action. Further increases in pH, however, appeared to increase soap consumption and decrease detergent action.

In dilute soap solution the soap first exists in the form of single molecules which have no detergent power. As the concentration of the soap increases a point is reached where the individual soap molecules combine to form micelles which do have detergent action. In the presence of alkali builders the concentration of soap at which micelles are formed is reduced. This appears to explain the role of alkaline builders in soap saving and detergent action. But when too much alakali is added to the solution the soap particles become so big that the soap is insoluble. Experience in the washroom places the optimum pH range, which ensures maximum detergency with minimum



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soap consumption, between 11.0 and 11.3. If we examine the pH scale in the range from 9.5 to 12.0, we see that after we pass pH 11.0 to 11.3, the hydroxyl ion concentration builds up very rapidly as shown in Table I.

This table shows that the increase of the pH of a solution from 10.0 to 11.0 increases the strength 10 times. The increase from 11.0 to 11.3 doubles this value and is 20 times as strong as pH 10.0. At pH 11.5 the solution is over 30 times as strong; at 11.6, 40 times as strong; at 11.9, 80 times as strong; and at 12.0, 100 times as strong.

Two factors affect the ease with which the desired pH values can be obtained: the amount of soil and the bicarbonate alkalinity of the water supply. As each increases, the strength of the alkali must be increased, not the amount. This is the basis of pH and titration control.

With a standard number of operations in the washing formula, only a certain amount of alkali can be used if it is to be rinsed out in an economical number of rinses. Thus the same titration (quantity of alkali) should be present at the start of each of the washing formulas. To obtain ideal pH value in the various operations, the alkali must not be too weak, otherwise so much of it has to be used to get ideal pH that extra rinses will have to be run to remove it. If the alkali is too strong, ideal pH values will be exceeded, soap consumption increased, or there will be too rapid a drop in pH value in the suds because there was not enough alkali in the break when the ideal pH value did exist.

In the selection of the best alkali for individual plant conditions it is important to decide on the soil classification of the bulk of the work. The other important factor is the bicarbonate content of the water supply. While water softeners remove calcium and magnesium from the raw water, they do not remove the bicarbonate and other ions but convert them to the corresponding sodium salts. Usually the sodium bicarbonate content is proportionate to the original water hardness. Sodium bicarbonate is a mild alkali that gives a pH of 8.3 which tends to lower the pH of the

stronger alkalies.

A simple test for the sodium bicarbonate content can be made on a 25 c.c. sample of soft water. A few drops of methyl orange indicator are added and one titrates with one tenth normal acid until the yellow color changes to orange or red. Plants with water testing under five drops can select an alkali on the basis of the type of soil to be removed. As the bicarbonate content increases above five drops however, this factor must be

considered in the selection of the best alkali. Plants with 15 to 20 drop titrations must use a strong alkali, particularly if they are also washing heavily soiled clothes.

Three sodium silicates—meta, sesqui, and ortho — give the necessary range of the strengths needed to ensure proper balance to meet most of the conditions found throughout the country. Caustic soda in combination with soda ash can also be used to give balanced formulas.

Sorption of Syndets by Fibres

SORPTION of various surface active agents from aqueous solution by cotton, viscose rayon, acetate rayon, nylon, and wool fibers is the subject of a paper by A. S. Weatherburn in the Third Seminar Book of Papers, Textile Technical Federation of Canada, Montreal, Quebec. In general, cationic compounds were found to be sorbed to the greatest extent and non-ionic compounds least. Anionics occupied an intermediate position with soaps being sorbed somewhat more strongly than the synthetics. Sorption of the fatty acid component from soap solutions is largely due to sorption of hydrolytic fatty acid or acid soap. Since the synthetics are not subject to hydrolysis it was decided to compare the sorption of soaps under conditions of suppressed hydrolysis with that of the synthetics. On this basis soaps are mostly sorbed to about the same extent as the synthetics and in some cases, to a lesser extent. The addition of sodium sulfate to solutions of sodium alkyl sulfates results in an increase in the sorption of the latter compounds in every case. The sorption of non-ionic di-isobutyl cresol-ethylene oxide compounds was found to decrease slightly with increasing length of the polyethylene oxide chain over the range studied.

The different fibers show little uniformity regarding their capacity for sorption of the various types of compounds. Wool, for example, has a high capacity for the sorption of anionic and cationic compounds, but does not sorb the non-ionics to any great extent. Cotton sorbs anionics and

cationics only in small amounts but more of the non-ionic compounds than any of the other fibers.

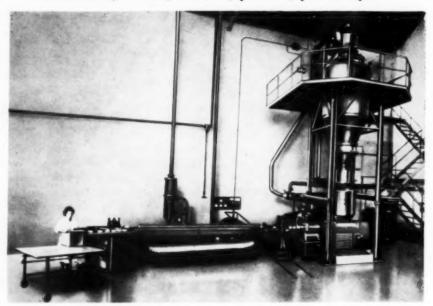
From the point of view of practical detergency the significance of sorption is not yet clearly understood. The measurements described in the paper were carried out at a load: solution ratio of 1:25 and the decrease in concentration of the solution due to sorption by the load varied all the way from a negligible amount to nearly 80 per cent of the original concentration. Much higher load ratios are employed under practical conditions and obviously the concentration of the residual solution could drop to very low values. This may not be undesirable, since it is probable that the purpose for which the detergent is used, the weakening of those forces which bind the soil particles to the fibers so that the former may be removed more readily by mechanical action in the wash wheel, has been accomplished as a result of the sorption of the detergent compound.

Ethylene Amines Bulletin

A new technical bulletin on the ethylene amines—ethylene diamine, diethylene triamine, triethylene tetramine, and tetraethylene pentamine—has recently been released by Carbide and Carbon Chemicals Co., New York. Physical, chemical, and physiological properties; specifications and shipping data; and application data are included. This technical bulletin (F-8163) is available, without charge, from the company at 30 East 42nd St., New York.

MAZZONI Continuous Soap Plants

save time, labor, steam, power, plant space



View of MAZZONI automatic vacuum soap equipment with a capacity of one ton of household soap per hour.

Advantages of the MAZZONI Process:

- Small plant space; only one operator needed.
- Saves 70% in steam, 50% labor, 40% electric power.
- Operates at low temperature, avoiding deterioration of soap.
- Vacuum process gives better toilet soaps. Deodorizing effect reduces perfume needs. Smoother, grit-free cakes which wash off evenly. Improved lathering. Automatic perfuming device included.
- Laundry soaps, pure or filled, ready for pressing and immediate packing without slabbing, cutting, etc.
- Suitable for adaptation in any soap factory, — a compact, low-cost vacuum process, continuous from neat soap to pressing and wrapping.
- Plants for outputs of half-ton, one ton, or two tons per hour.

For further detailed information, write to

G. MAZZONI, S. p. A.

Busto Arsizio, (Varese) Italy

Cable address: Cosmazzoni, Busto Arsizio

New D&O Catalog

Latest catalog and price list of essential oils, aromatic chemicals and certified colors has recently been published by Dodge & Olcott, Inc., New York. Containing twenty pages of price listings, descriptions and related information the new catalog includes concentrated citrus oils, terpeneless oils, floral waters, absolutes and concretes, oleoresins, resinexes, balsams, gums, animal fixatives, tinctures, ambreine, aromatic specialties, ionones, iraldeins, methyl ionones, and vanilla aromatic chemicals. Copies of the new catalog are available on request from the company at 180 Varick St., New York.

Catalog on Smith Sprayers

A new catalog, fully illustrated, and giving detailed specifications and uses of Smith sprayers, has recently been published by D. B. Smith & Co., Utica, N. Y. Described in detail are specifications for "Jim-Dandy" cart sprayers, "Smith Ritesize" sprayers, "Smith Banner" sprayer, Smith DDT sprayer, "Smith E-Z" knapsack sprayers, Smith continuous and hand sprayers, "Smith CCC" spray pump, and "Smith Speedex."

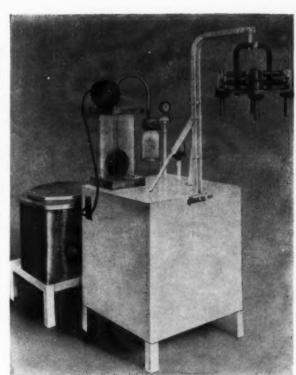
New Fire Extinguisher

A new type fire extinguishing agent now is in full-scale production at the Eston Chemicals Division, American Potash & Chemical Corp., Los Angeles, it was announced recently. The compound is known chemically as methylene chlorobromide, and is commonly designated "CB."

Dust Pick-Up Attachment

A new dust pick-up vacuum cleaning attachment for use on Multi-Clean floor machines while doing light sanding or finish sanding has recently been announced by Multi-Clean Products, Inc., St. Paul. According to the manufacturer, the unit can be attached to or removed from any Multi-Clean heavy duty floor machine in 10 minutes. The device consists of a detachable vacuum power unit with a one horsepower motor that mounts on the floor machine handle, and a suction ring assembly which clamps to the

A new, improved machine available for filling bottles that have been previously labeled and pack-ed in cases, Eyrle Co., San Francisco, announced recently. Operating with the head of the filler lowered into the the filler case, the filler fills the bottles by vacuum and is designed to return surplus liquid to an overflow container. Motor automatically stops when bot-tles are filled. The machine is said to be suited for all types of free-flowing liquids and eliminates handling of heavy, filled bottles. Easily cleanthe filler is ed. available with or without supply tank.



base of the machine without drilling. Both the vacuum and the machine operate together from the switch lever directly under floor machine handle bar. However, the floor machine can be operated independently.

An adjustable leather shield concentrates suction for vacuum cleaning action. The vacuum unit is capable of a 46 inch water lift power to pick up all sanding dust.

Dust pickup unit attached to a Multi-Clean MC-16 Floor Machine. Inset shows underside of suction rings.



Hild Vacuum Bulletin

A new circular describing Hild wet-or-dry vacuums, models 115 and 155, has recently been published by Hild Floor Machine Co., Chicago. The circular furnishes a diagram which explains the principle of the Hild "By-Pass" motor. Included, also, are 15 pictures showing various applications for Hild vacuums. Complete descriptions and specifications for both models are given. Copies of the circular are available upon request to the company at 740 West Washington Blvd., Chicago.

Snell Forms New Division

The formation of an engineering physics department in its engineering division was announced recently by Foster D. Snell, Inc., New York. At the same time, the firm announced that Walter L. Hardy has been appointed director of engineering and Joseph P. McGill has been named head of the engineering physics department. One of the primary functions of the new department is to study shock and vibration and their effect on packaged and unpackaged instruments and delicate equipment.



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New "G-11" Bibliography

A supplemental bibliography of scientific articles on "G-11", its brand of hexachlorophene, has recently been published by Sindar Corp., New York. The new bibliography, published as Sindar Reporter No. 4, 1953, contains abstracts of articles which have appeared since the publication of technical bulletin H-1 in May, 1952. Copies of both the full bibliography and the current issue of the Sindar Reporter containing the supplemental bibliography are available upon request from the company at 330 West 42nd St., New York.

Utility Floor Machine

A new utility model of its "Speedboy Deluxe" floor maintenance machine, was announced recently by Robert J. Pond, vice-president of Advance Floor Machine Co., Minneapolis. The new machine, known as "Speedboy Special," comes in four models. The smallest of which has a 12-inch brush spread and weighs 59 pounds.

Hydrogen Peroxide Sheet

A new safety data sheet on hydrogen peroxide, has recently been published by the Manufacturing Chemists' Association, Washington, D. C. "Chemical Safety Data Sheet SD-53" gives properties and information for the safe handling, storage and use of hydrogen peroxide. Complete recommendations for safety procedures to be followed in unloading, storing, handling and waste disposal are given in the safety data sheet. A section on health hazards and their control outlines proper personal protective equipment and first measures in the event of contact with skin and eyes. Copies of "SD-53, Hydrogen Peroxide" may be obtained from the Association, at 246 Woodward Building, Washington 5, D. C., at 25 cents each.

Two-Step Brush Cleaner

A new, non-flammable, nonodorous liquid cleaner for all types of brushes, has recently been introduced by M & L Laboratories, Inc., Chicago. Brushes are cleaned by soaking in the cleaner and then rinsing in water. Product cleans oil, water and rubber based paints.

PRODUCTION Clinic

By E. G. Thomssen, Ph.D.

ASED on conversations with officials of representative firms in the soap, detergent and sanitary chemicals industry, I find the conclusion inescapable that insufficient attention is being given to the control of air contamination. Few research projects on methods to overcome pollution of the atmosphere in which we live and work are under way. The condition is especially prevalent in interior spaces where sanitary products are used in the greatest volume. Only infrequently do we encounter constructive methods of counteracting the disagreeable effects of contaminated air. Generally the methods used are directed toward deororization (masking), and frequently the deodorants used are more offensive than the odor they are attempting to overcome.

City dwellers seem quite content to live in their environments of polluted air, although efforts in major cities are just now getting under way to curb the most flagrant offenders. However, much remains to be done in this direction and the field appears to be one in which the proverbial "good future" is a stark reality. People do object more vigorously when polluted air is found right in the home. Contamination of the atmosphere out-ofdoors can be tolerated on the basis that it seems impossible to carry on manufacturing activities in many industries without a certain amount of smoke, fumes, odor and dirt being produced. Disasters resulting from air pollution such as occurred in Donora, Pa., and in the Meuse Valley, France, reduce the degree of toleration of air contamination and sometimes produce salutary results.

The problem of air contamination of the outside atmosphere normally may not concern the chemical specialties industry, although many of the larger units in the industry are concerned about and taking some action on the problem in their own immediate localities. Some of the products produced by chemical specialties manufacturers can be used to help control air contamination, since cleanliness and good housekeeping by industrial plants



DR. THOMSSEN

can help to alleviate the situation. Possibly this whole field might be explored to develop more and better chemical specialties designed to reduce air contamination.

As air contaminants enter homes, factories, offices, hospitals and other institutional buildings they become of more immediate concern and importance to the sanitary chemicals industry. The prevention and elimination of air contaminants indoors is a function of the products of the sanitary chemicals industry.

From a strictly selfish standpoint, the elimination of air impurities in a manufacturing plant can result in the salvaging of waste materials. In addition, the better the housekeeping job done in a plant, which includes providing "clean" air, the better the morale of the workers in that plant and, generally, the greater their degree of efficiency.

Methods of air purification, including deodorizing to make it more pleasant, are numerous. They include deodorization, or masking with another odor, using paradichlorobenzene blocks, and deodorant sprays, which are mainly a perfuming material in a vehicle;

narcotizing the sense of smell with a material such as formaldehyde; the use of chlorophyll in one or several of many products in which it is included as an ingredient; and by the use of ozone. Other than chemical methods of air purification include ultraviolet light; and filters, which at times may contain an aromatic material or an aerial sanitizer such as triethylene glycol; washing air by dust collectors; forced ventilating systems; high voltage precipitation of dusts, especially by the use of electrostatic air cleaners, and air drying using such materials as silica gel. In addition methods have been devised to protect living spaces against bacteria with disinfecting sprays and such gases as the glycols and chlorine. All of these approaches to the problem of air purification have a degree of value. But none of them has wide, efficient and economical application in the majority of the interior areas in which most of us spend the greater portion of our lives.

Although, unfortunately, we do not have at hand a ready-made, sixeasy-steps solution of the growing problem of air pollution, certain fairly obvious steps do suggest themselves. First, we should recognize that the problem is a big one, requiring not only the use of correct methods and materials for its solution, but also, and probably what is always more difficult, the education of the public to aid and correct it at its source. The ideal attack on air pollution begins locally. Individual plants, institutions and even private homes should take the initiative to see that they themselves are not contributing to air pollution. The aid of local authorities and committees fighting air contamination should be enlisted and act where needed. Voluntary action is always preferable, of course.

Another approach to the problem might be through a study of weather and climatic conditions. These both contribute considerably to the removal of air contaminants and some study should be made as to how best to utilize them. Humidity, when high, settles down in a thick blanket, sometimes referred to as smog. Los Angeles is the outstanding example of an area subject to smog formation. This con-

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possible.

dition occurs inside as well as outside of buildings. Possibly some reduction in air contamination might result from determining the effect of light and dehumidifying inside areas more effectively. In considering the whole problem of air contamination, sanitation engineers might study the relationship between weather and air purification as a possible solution.

Since air pollution is costly both in terms of health and destruction of property, it presents a challenging field of exploration for both the user and producer of sanitary chemicals.

New Rapid Blender

new rapid blender especially designed for powdered products is being featured by Patterson Kelley Co., East Stroudsburg, Pa. The blender consists of twin steel sheet shells welded at the base and spread at the top to form a "V." The open end of each shell, used to charge and empty the machine, is closed with a removable cover. The mixing of the materials takes place rapidly, regardless of particle size. No separation or attrition occurs because of the slow rotation of the shells. The firm's catalog No. 12, describing the blender, is available on request.

Gelling Agent

GELLED petroleum oils are finding increasingly widespread use in various types of cleaning agents. One such gelling material is aluminum octoate made by Witco Chemical Co., New York. The gels formed are firm, show less viscosity on ageing and reportedly do not break down when certain additives are used. Literature, technical assistance and samples are available on request.

Filtering Aid

A filter aid for the rapid filtration of alkaline solutions, vegetable oils, tallow, lard, soap solutions, perfuming materials, waxes, emulsions, etc., is being produced under the trade name, "Solka-Floc," by Brown Co., Berlin, N. H., The firm maintains a technical service department which can advise on methods to obtain faster, and safer filtering through the use of their product.

Threadless Pipe Joiner

COOPER Alloy Foundry Co., Hillside, N. J., is now offering a device for joining pipe or tubing without threading or welding. Trade named, "Quikupl," the new patented device features economy in installation costs, rapid installation, quick disassembly, tight joints and fewer pipe fittings required. The device, which is made of stainless steel, is described fully in the company's bulletin Q 100, which is available on request.

Automatic Weigher

AN automatic check weigher, designated "Selectrol," is now available from Exact Weight Scale Co., Columbus, O. The scale weighs, classifies, sorts and counts packages into separate weight groups. Manual spot checking is not necessary with this scale as every package is automatically check weighed without interruption. Further details are available from the maker.

Booklet on Spray Dryers

A new eight-page booklet, entitled "Snell Packaged Unit Spray Dryers," has recently been issued by Foster D. Snell, Inc., New York. The booklet has been revised from earlier editions brought out in 1950 and 1952. In this edition, page five shows diagrams on the conventional method

of drying products compared with the method employed by using a spray dryer. Page six and page seven answer questions concerning the use of spray dryers. Booklets are available on request to the firm at 20 West 15th St., New York.

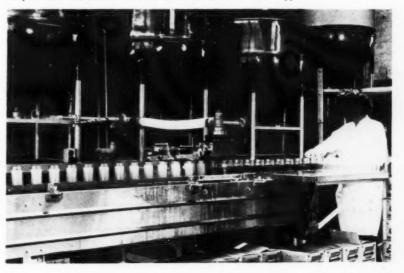
Insect Repellent Booklet

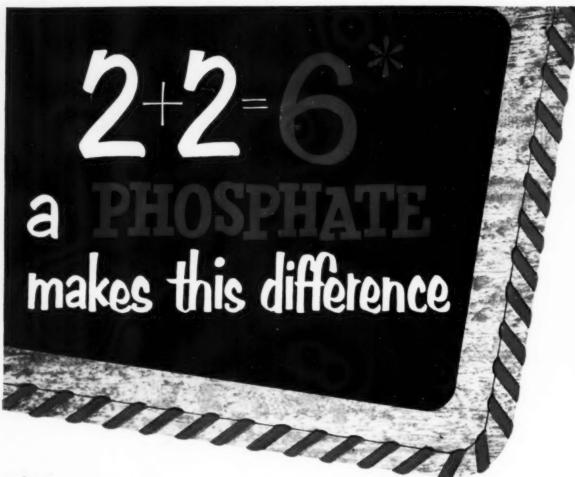
A new bulletin describing "Ticks-Off," an insect repellent in spray form to repel ticks, flies, and other bugs, has recently been issued by Mine Safety Appliances Co., Pittsburgh. Copies of the new bulletin, No. 0408-2, may be obtained upon request from the company at Bradock, Thomas and Meade Sts., Pittsburgh.

Package Water Conditioner

A new package water conditioning plant designed to chlorinate, coagulate, clarify, filter, neutralize, de-alkalize and soften raw water supplies is graphically described and illustrated in an eight-page bulletin, No. 3869, recently released by Permutit Co., New York. The bulletin lists the component parts of the complete water conditioner, details the principles of operation, gives ratings, capacities and sizes and illustrates some typical installations. Copies of the bulletin are available upon request to the company at 330 West 42nd St., New York.

A new automatic filling machine that handles 15 different style bottles has recently been installed at E. Z. Est Products Co., San Francisco, manufacturers of cleaners and polishes. The machine, made by F. L. Burt Co. of San Francisco, and known as the "Simplex," fills 20 to 60 containers per minute, automatically, and requires but one operator. A product may be fed to the head of the filler direct from kettles or from hoppers.





* Synergism ... cooperative action where the total effect is greater than the sum of the individual effects taken independently



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Products and PROCESSES

Non-flammable Detergent

Potassium soap of soybean oil (one kilo containing 50 percent water), one kilo of ammonia soap (50 percent solution) and 50 grams of soybean oil fatty acid ethyl ester are mixed to obtain a noncombustible detergent for machinery. Japanese patent 7135 (1951), Seiji Sumimoto. Through Chem. Abstracts, volume 47, page 5146.

Soap for Leather Cleaning

Soap suds are designated as the principal agent in cleaning genuine leather fittings in the car, according to a recent release by the Upholstery Leather Group. Recommendations for removal of stains of perspiration are: wash with mild soap and if there is an excessive accumulation, wash with baking soda, one teaspoonful to a glass of water. Wash food stains at once with mild soap suds. Oil can also be treated with mild soap suds. For acids, immediately apply a mild alkali, such as a teaspoonful of baking soda to a glass of water, then wash with mild soap suds.

Emulsifiable Pesticides

A method for making antiparasitic compounds as emulsifiable
oils is described: chlorinated insecticides (35-75 percent) are dissolved in
10-50 percent organic solvent. The
solution is added to 5-15 percent ionic
emulsifying agent (alkyl or alkyl
aryl sulfates) and 2-5 percent soaps.
A mixture consists of DDT 42 percent, solvent (toluene and cyclohexanone) 38 percent, sulfonated fatty
acids 15 percent, and triethanolamine
sulforicinoleate 5 percent. Italian patent 466,913, Chem. Abstracts, vol.
47 No. 1, p. 264.

Fungicides from Rosin

A report on preservatives appears in a recent issue of the Hercules Chemist, house organ of Hercules Powder Co., Wilmington, Del. It deals with "Rosin Amine D", a primary amine derived from a specially treated

rosin. The amine, a technically pure grade of dehydro-abietylamine, and two of its salts, the acetate and the pentachlorophenate are toxic to most common bacteria and fungi, according to the manufacturer. "Rosin Amine D" pentachlorophenate is currently in use as a fungicide in paper, for soap wrappers, and to preserve cotton fabrics used for tenting, tarpaulins, coated fabrics, belting and rubberized fabrics. Both the pentachlorophenate and the acetate are used in preserving cordage, rope and twine.

Isotopes Detect Bacteria

A Geiger counter and radio active isotopes of phosphorus are being used in research to improve dairy cleanliness, Dr. Samuel A. Lear, dairy research specialist at the New Jersey Agricultural Experiment Station, New Brunswick, N. J., announced recently. The Geiger counter, Dr. Lear explained, is used to detect dirt and other impurities left by ineffective cleansing agents or by inefficient methods of cleaning dairy equipment, while the radioactive isotopes are used to improve cleaning agents and techniques.

To make the Geiger-counter test, Dr. Lear mixes radio-active isotopes with a known growing bacteria and adds the mixture to milk or other dairy products. The products in turn are applied to a test area, which is then cleaned by the method under scrutiny. The effectiveness of the method is measured by the sensitive Geiger counter. If the method fails to remove all the isotope-filled bacteria, the counter clicks a warning on contact with the material.

Silicone Booklet

Dow Corning Corp., Midland, Mich., published on its recent tenth anniversary an illustrated twenty-three page booklet entitled "Tall Tales and Fabulous Facts." The tall tales consist of early American legends of the Paul Bunyan and Johnny Appleseed variety. They are related to some fabulous facts about silicones, semi-

organic materials used widely as foam depressants and in polishes and other chemical specialties.

Hydrophilic Lanolin

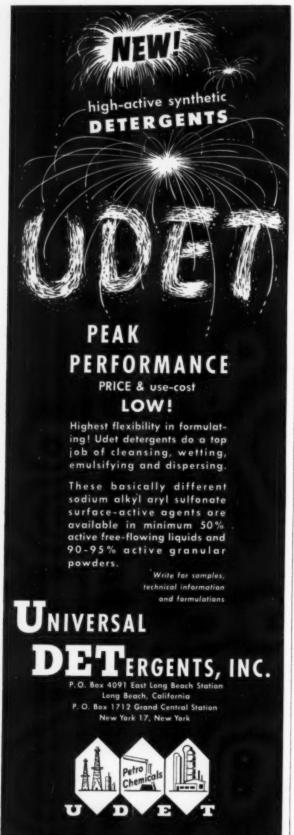
Water-dispersible and watersoluble derivatives of lanolin are reviewed in the June issue of Schimmel Briefs, published by Schimmel & Co., New York. These products are prepared by the action of ethylene oxide or its polymeric derivatives on lanolin and lanolin fractions. The polyoxyethylene chains which are thereby introduced into the lipophilic molecules make them more soluble in water and correspondingly less soluble in oils. Among uses of water-dispersible modifications of lanolin are shampoo formulations. In an example cited in U. S. patent 2,478,820, a modified lanolin was added to a soap solution in the proportion of one per cent. The resulting product represented an improvement over a shampoo made with ordinary lanolin because it was transparent and exhibited excellent sudsing properties.

Heads Chemical Group

Dean R. Webb, Dow Chemical Co., Midland, Mich., was elected president of the Chemical Salesmen of Cleveland at a luncheon held recently in the Hotel Carter. Other officers installed were: William Landgrebe, Harshaw Chemical Co., vice-president; Hal Amway, Monsanto Chemical Co., secretary; Charles Blazier, Mc-Kesson & Robbins, Inc., treasurer.

Mensanto Shifts Staff

Several new appointments were announced recently by Monsanto Chemical Co., St. Louis. J. W. Colgan has been named maintenance supervisor for Monsanto's new plant at Avon Cal. Dr. Christian H. Aall has been appointed director of development for the phosphate division in St. Louis. Also, Donald A. Roper has been named assistant research director in the Anniston, Ala. laboratories of the company's phosphate division research department. He is in charge of research investigations of existing chemical processes in the various plants of the phosphate division.



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Hexachlorophene is a development of Sindar Research Laboratories

NEW Patento

The information below is furnished by patent law offices of

LANCASTER, ALLWINE & ROMMEL

402 Bowen Building Washington 5, D. C.

The data listed below is only a brief review of recently issued pertinent patents obtained by various U. S. Patent Office registered attorneys for manufacturers and/or inventors. Complete copies may be obtained direct from Lancaster. Allwine & Rommel by sending 50c for each copy desired. \$1.00 for Canada. They will be pleased to give you free preliminary patent advice.

No. 2,647,073. Ammoniated Dentifrice Containing Anhydrous Dicalcium Phosphate, patented by Arnold J. Singer, Newark, N. J., assignor to Amm-1-Dent, Inc., Jersey City, N. J., a corporation of New Jersey. The patent discloses a dentifrice paste comprising from 3% to 50% by weight of urea, from 1% to 7% by weight of diammonium hydrogen phosphate, between 40% and 50% of polishing agents including tricalcium phosphate, and from 1% to 25% anhydrous dicalcium phosphate, a humectant and sufficient water to form a paste.

No. 2,646,435. Making White Soap, patented by Frank L. Jackson, Cincinnati, and John C. Bayer, Sharonville, Ohio, assignors to Procter & Gamble Co., Cincinnati, Ohio, a corporation of Ohio. The patent describes the process of treating hydrogenated vegetable fatty materials containing substantially colorless color precursors, which comprises the steps of treating said materials with about 0.1% of a compound of the group consisting of chlorites of alkali metals and alkaline earth metals in water solution in the presence of about 0.025% of sulfuric acid at a temperature in the range of 100 to 140° C. thereby converting the color precursors into colored materials, and thereafter admixing with the treated fatty matter an alkaline material in amount at least sufficient to neutralize the remaining acid, and bleaching the fatty matter with from 0.5 to 6% of a bleaching earth at a temperature in the range of 100 to 140° C., and filtering the oil.

No. 2,645,592. Pest Control Chemicals, patented by Ramsey G. Campbell, Richmond, Calif., assignor to Stauffer Chemical Co., a corporation of California. An acaracide is covered comprising an inert insecticidal adjuvant as a carrier and an effective concentration of a material selected from the group consisting of 4-chlorophenyl 4' fluorophenyl sulfone and 4-bromophenyl 4' fluorophenyl sulfone.

No. 2,645,593. Quaternary Ammonium Naphthenate and Method of Making the Same, patented by Archibald Mortimer Erskine, Berkeley, Calif.

1. N-alkylbenzyl-trimethyl ammonium naphthenate having the formula

in which R is an alkyl group between $C_{\ast}H_{17}$ and $C_{18}H_{37},$

No. 2,645,615. Thickened Aqueous Detergent Solutions, patented by Frederick Joseph Pollok, Troon, Scotland, assignor to Imperial Chemical Industries Limited, a corporation of Great Britain. The patent discloses an aqueous solution of a soapless detergent selected from the group consisting of synthetic organic anionic and non-ionic soapless detergents, said solution being thickened with an alkali metal salt of an acid ester of a partially esterified polyvinyl alcohol in which the vinyl alcohol groups are partly esterified by maleic acid, partly acetylated and partly unreplaced.

No. 2,645,651. Recovery of Fatty Acids, patented by Everett N. Mortenson, Chicago, Ill., assignor to Swift & Co., Chicago, Ill. The method of recovering fatty acids from substances containing fatty material is described, which comprises: treating said substances with liquid water at temperatures and pressures whereby fatty acids contained in the substances are substantially dissolved in the water, the amount of water being such that the concentration of fatty acids in the resulting solution is between about 1 per cent and 3 per cent by weight, separating the fatty acid solution, cooling said solution to cause the fatty acids to precipitate, and separating the precipitated fatty acids from the

No. 2,645,648. Stabilization of Glyceride Oils with Oxydialkanoic Acids, patented by Cyril D Evans, John C. Cowan, and Arthur W. Schwab, Peoria, Ill., assignors to the United States of America as represented by the Secretary of Agriculture. A new composition of matter, a glyceride oil and a stabilizing amount of one of the group consisting of oxydiacetic acid and oxydipropionic acid is described.

No. 23,680. Purification of Glyceride Oils, patented by Benjamin Clayton, Pasadena, Calif., assignor, by mesne assignments, to Benjamin Clayton, doing business as Refining, Un-incorporated. Original No. 2,412,251, dated December 10, 1946, Serial No. 483,953, April 21, 1943. Application for reissue October 7, 1952, Serial No. 313,620. The process of purifying vegetable and animal oils, low in gum content and containing impurities, including free fatty acids is disclosed, which comprises, mixing therewith an alkaline refining reagent capable of reacting with said impurities to precipitate the same and produce soap, said reagent being added in sufficiently high concentration to produce a stratified mixture including an oil phase, soap phase, and an aqueous phase when the mixture is subjected to centrifugal separation, thus interfering with said separation, reducing concentration by adding an aqueous diluent to said mixture in sufficient quantity to overcome such stratification, said quantity of aqueous diluent reducing the concentration of the excess of alkaline reagent to at least 8° Baumè, whereby to permit said soap to be discharged with said aqueous layer, and centrifugally separating the thus conditioned mixture.

Monsanto Sales Shifts

Several sales organization changes in its phosphate division were announced recently by Tom K. Smith, Jr., division general manager of sales, Monsanto Chemical Co., St. Louis. R. H. Baugh, branch manager at Cleveland became manager of administrative services in the division general offices in St. Louis. E. A. Mc-Adam, resident salesman in Houston, was appointed branch manager in Cleveland. This office, which for several years has operated as an independent branch office, recently came under the jurisdiction of the Detroit office. O. L. Ryser of the division's Chicago office succeeded Mr. McAdam at Houston. Mr. Ryser was replaced in Chicago by D. E. Witt. H. P. Walmsley, branch manager of the division's Detroit office, has become district manager with supervision over the Detroit, Cleveland and Cincinnati offices. J. R. Harrington was named manager of the Cincinnati office.

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SHARP BROTHERS

(Established 1914)

201 Orient St., Bayonne, N. J.

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> All cuts are clean and accurate.

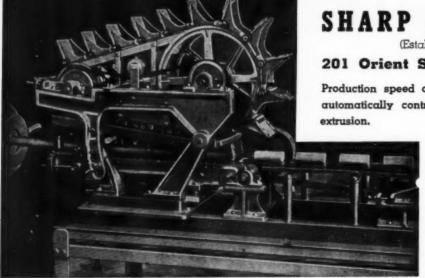
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* Patent Pending



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Buying Habits

(From Page 53)

said their purchasing is influenced by advertising. 38.7 percent reported they were not influenced by advertising in purchasing; 9.9 percent didn't know and 8.5 percent did not answer the question. Of those influenced by advertising to buy, 61.2 percent reported being influenced by magazine advertising; 42.1 percent by television commercials; 38.5 percent by radio advertising; 33 percent by newspaper advertising; 22.8 percent by store advertising; 6.6 percent by direct mail and 5.7 percent by sign and poster advertising.

As to the source of the most useful information about products purchased, 27.3 percent listed friends and relatives as their first selection. Magazine advertising was listed as 16.3 percent for the first selection and

topped the second selection list with a percent of 16.4.

Only 14.1 percent reported purchasing a toilet article because of displays; 72.0 percent did not purchase because of the display. Of those influenced by displays in the purchases, 4.1 percent were so affected in buying shampoos; 1.0 percent for shaving products, 1.6 percent for dentifrices and .6 for other than soap bath preparations.

In deciding what product to purchase personal experience was the overwhelming favorite. 75.2 so reported for dentifrices and shaving cream and 66.2 percent for hair preparations. Uniformly second in importance was brand or company name: 20.7 percent for toothpaste and shaving cream and 16.6 for hair preparations. Price generally was the third most important factor for tooth paste and shaving cream (6.6 percent), although in the case of hair prepara-

tions recommendations of friends or relative (15.2 percent) and those of store clerks (6.9 percent) were ahead of price.

The most important factor in decisions to purchase are given in tables for age groups. In all of these, personal experience is the most important.

A minority of those responding to the questionnaire reported they are using greater quantities of products this year than last year. The percentage using more was put at 22.9, the number not using a product in greater quantity was 12.9 percent and those not reporting totaled 64.2 percent. Increased product usage this year was reported by 8.9 percent for shampoos; 3.3 percent for shaving preparations. 7.1 percent for dentifrices and 2.4 percent for other than soap bath preparations. The figures are also given on the basis of geographical areas and

(Turn to Page 105)

Table VIII. Reasons for Changing Outlet for Purchasing Dentifrices

	Total		Total		Conven-		Availa- bility		Quality		Better Selection		Price		Brand Preference		Miscel- laneous		Reason Not Reported	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%		
Number who changed type of outlet					_															
From 5¢ and 10¢ Store to: Department Store Drug Store House to House. Supermarket or Grocery	2 49 4 40		2 29 1 32				1 1		1 2 -		$\frac{10}{2}$		1 2		5		_ 1 2			
From Department Store to: 5¢ and 10¢ Store Drug Store House to House Supermarket or Grocery A miscellaneous outlet	2 6 2 7 1		1 5 1 6				<u> </u>		=======================================		_ _ 1		$\frac{1}{1}$							
From Drug Store to: 5¢ and 10¢ Store Department Store House to House Supermarket or Grocery A miscellaneous outlet	7 8 4 77 4	100.0	3 2 3 76	98.7	1 1 —		11111		1 _ _		2 2 6 2	7.8			1 3 — 2 2	2.6		1.3		
From House to House to: 5¢ and 10¢ Store Drug Store	1 4		_				Street, Street		_		:		23		1		-			
From Supermarket or Grocery to: Drug Store	3		1		1		=		_		=		=		1		=			
to: Drug Store	1		-		_		_		-		_		1		-		-			
Number not reporting what change was made	8		-		_															



INSOLUBLES SPOIL PRODUCTS

Contaminating metal ions probably spoil more syn-Contaminating metal ions probably spoil more synthetic detergents, soaps, soap products and cleaning compounds than any other single factor. They reduce detergency, increase precipitation and encourage scum and curds in hard water. They cause oxidation, discoloration, chalking and rancidity. They clog liquid soap dispensers, shorten shelf-life, and decrease repositions of the control of the co saponification.

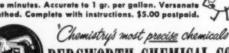
BETTER SYNERGISTIC ACTION

Versene works together with other soapmaking compounds to make them better. Exceptional stability at high temperatures throughout the pH range increases efficiency and prevents decomposition — even in hot concentrated alkaline solutions. It is safe to say that no matter what you may make in the way of a synthetic, soap, soap product or cleaning compound the proper addition of one or more of the Versenes can make it better — often at lower cost.

VERSENE CONTROLS QUALITY

Versene controls contaminating cations - prevents Versene controls contaminating cations — prevents them from spoiling formulations in either process or product form. The quality and complexing power of Versene is guaranteed in both sample and carload lots. The Versenes are made only under patents, originated, developed and operated by F. C. Bersworth. Available in wet or dry form, they are well worth investigation. Write Dept. C. Send at once for samples and Technical Bulletin #2. Chemical counsel on request.

VERSENE WATER TEST KIT. Tells total hardness in two minutes. Accurate to 1 gr. per gallon. Versenate method. Complete with instructions. \$5.00 postpaid.



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Siegel Chemical Co., One Hanson Place, Broaklyn 1, New York
George Mann & Co., Inc., 231 Fox Point Boulevard, Providence. Rhode Islar
Wassatch Chemical Company, 2225 South Fifth East, Salt Lake City, Utal
Barada & Page, Inc., Houston, Dallas, Corpus Christi, New Orieans,
51. Louis, Wichila, Oklahoma City, Tules, Kansas City, Mo.

WEST COAST AGENTS
Brown-Kneckh-Heimann Co., Son Francisco, California
Van Waters & Rogers, Inc., Seattle, Wash. & Portland, Ore.

Brown Corporation, Los Angeles, California

NOW! Top Quality - Reduced Cost

*U. S. Patent 3,544,093

Your deodorant bomb can be of HIGHER QUALITY than ever before at LESS COST with the Market-Tested TRUE DEODORANT for Aerosol Bombs

SELLERS AND FILLERS OF AEROSOL DEODORANTS

know the value of a TRUE deodorant for repeat sales at the household and industrial levels. Leading companies are finding Metazene the fast-acting chemical neutralizer that passes all tests for quality

PEST CONTROL OPERATORS AND INSTITUTIONAL SANI-TARY ENGINEERS

find METAZENE Concentrate particularly economical when used with standard mechanical aerosol generators or spraying equipment. The compound maintains effective odor control in banquet rooms. wards, warehouses, etc. . . . removes dead rodent odor after extermination . . . quickly elimingtes smoke odor after fires.

and effectiveness, where older techniques of simple odor masking or desensitization will not suffice. METAZENE can be used alone or formulated in conjunction with glycols and compatible odorants.

For further information and prices, write:

KILGORE CHEMICALS

ATLANTIC RESEARCH CORPORATION

ALEXANDRIA, VIRGINIA

Table IX. Reasons for Changing Outlet for Purchasing Hair Preparations

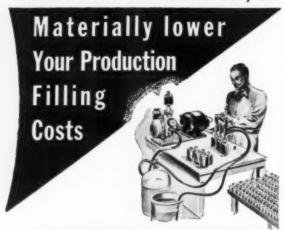
	Total		Total		Con		Avo		Qua	ility	Bet Selec		Pri	ce	Bro Prefer		Mis		Rec No Repo	ot
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%		
Number who changed type of outlet																				
From 5¢ and 10¢ Store to: Department Store Drug Store House to House Supermarket or Grocery A miscellaneous outlet	3 30 3 17 3		2 15 2 15 2		3 2		2 1		1 3 1		1 -		- 4 -				$\frac{-}{\frac{1}{1}}$			
From Department Store to: 5¢ and 10¢ Store Drug Store House to House Supermarket or Grocery	1 6 1 2		1 3 1 2						1				<u>_</u>							
From Drug Store to: 5¢ and 10¢ Store Department Store House to House Supermarket or Gracery A miscellaneous outlet	6 8 11 43 10		3 3 5 41		- - - -		1 1 -		= = = = = = = = = = = = = = = = = = = =		2 1 -4 2		 6 2		1 4 1 1 5		<u>-</u>			
From House to House to: 5¢ and 10¢ Store Drug Store Supermarket or Grocery	2 4 1		1		1 _		=		<u>-</u>		1		$\frac{-}{1}$		1 2 —		<u>_1</u>			
From Supermarket or Grocery to: Drug Store	2		2		<u>_</u>		_		Ξ		=		_				_			
From a Miscellaneous Outlet to: Drug Store	2 2		_		1		=		1		- 1				-					
Number not reporting what change was made	9																			

Table X. Products Used in Greater Quantity This Year
Than Last Year by Age of Purchasers

	Total		Total 15-20 years		21-30 years		31-45 years		46 years and over			ge not ported	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
Number using a product in greater quantity	508	100.0	52	100.0	117	100.0	170	100.0	155	100.0	14	100.0	
Hair tonics and dressings. Shampoos Shaving scaps and creams. After shave preparations. Deodoranis	45 17 12	11.8 8.9 3.3 2.4 8.1	4 5 4 3 4	7.7 9.6 7.7 5.8 7.7	13 9 8 2 9	11.1 7.7 6.8 1.7 7.7	23 18 3 5	13.5 10.6 1.8 2.9 10.0	18 10 2 2 10	11.6 6.4 1.3 1.3 6.4	2 3 — 1		
Toothpastes and toothpowders	12 10 19	7.1 2.4 2.0 3.7 2.4	2 2 3 1	3.8 3.8 5.8 1.9 1.9	13 3 2 7 2	11.1 2.6 1.7 6.0 1.7	14 4 4 7 9	8.2 2.3 2.3 4.1 5.3	3 3 1 4	1.9 1.9 .6 2.6	4		
Hand lotions and creams	6 9 14	19.3 1.2 1.8 2.8 2.4	13 5 2	25.0 9.6 3.8	15 — 3 7	12.8 2.6 6.0	39 4 1 6 3	22.9 2.3 .6 3.5 1.8	30 2 3 2 2	19.4 1.3 1.9 1.3 1.3	1 - 1		
Other skin creams. Lipsticks Other make-up items Home permanenis Nail enamel and removers	23 7 18	8.7 4.5 1.4 3.5 2.8	2 9 1 1 6	3.8 17.3 1.9 1.9 11.5	7 4 	6.0 3.4 5.1 1.7	18 8 4 6 3	10.6 4.7 2.3 3.5 1.8	17 2 2 4 3	11.0 1.3 1.3 2.6 1.9	_ _ 1		
Number not reporting item	158	31.1	9	17.3	34	29.1	44	25.9	64	41.3	7		

Because some respondents gave more than one answer, each column totals more than the base figure and more than 100%.

ERTEL BOTTLE FILLERS MEET DEMAND FOR 40-80 BOTTLES PER MINUTE, and



ERTEL PORTABLE

This Vacuum Bottle Filler belongs in every plant. Fills batch or sample lots of materials at lowest cost; for small operations where large expensive equipment is not practical. Fully automatic overflow—no drip spouts. Instantaneous flow—won't fill defective or cracked bottle.



ERTEL ESA FILLER FOR SMALL BOTTLES

The most practical filler for small bottles in quantities of 40 to 60 per minute. To appreciate this unit it should be viewed in operathe finest low cost trouble-free unit on the

ERTEL PNEUMO-VAC FILLER Filling Range 3" to 13" High Bottle

For speeds up to 40 quarts per minute, this precision Ertel filler has no equal. New type spouts positively prevent drippage. Available with circulatory passages either bronze, plated, or stainless steel. Adjustments are simple and require but a few seconds time. If you have a filling problem see the Pneumo-Vac - it's designed for low cost operation.



Ask to have an Ertel representative show you why Ertel Fillers are so enthusiastically acclaimed by users in the pharmaceutical, drug, cosmetic, chemical and food industries.

ERTEL ENGINEERING

KINGSTON 6. Branch Office & Sh m Located in New York City COMPLETE LINE OF ***R Liquid Handling Equipment





Vyandotte

chemicals for soaps and detergents

CAUSTIC SODA-Wyandotte Mercury Cell Caustic is exceptionally pure and uniform . . . reagent quality.

SODA ASH-Purity, quality, and uniformity of Wyandotte Soda Ash is maintained by strict control testing throughout manufacture.

KREELON* CD-an alkylarylsulfonate-type detergent which combines the advantages of the detergent with

CARBOSE* D-A sodium CMC specifically designed for detergency promotion . . . produces long-lasting suds, reduces skin irritation.

PLURONICS*-Wyandotte's new series of nonionic surfactants . . . including the only 100% active flake nonionic commercially available.

Wyandotte Chemicals is also an excellent source for the following chemicals:

Benzene hexachloride (BHC) . . . Bleaching agents . . . Sodium CMC . . . Chlorine . . . DDT . . . Detergents . . . Emulsifying agents . . . Ethylene glycols . . . Lindane ... Methyl Bromide ... Sodium bicarbonate ... Solvents (chlorinated) . . . Water softeners . . . Weed Killers ... Wetting Agents.

You'll find Wyandotte a dependable source of chemicals for soaps and detergents. Skilled technical assistance is yours for the asking. Mail the coupon for specific data.

yandotte CHEMICALS

WYANDOTTE CHEMICALS CORPORATION WYANDOTTE, MICHIGAN Offices in Principal Cities.

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Please send da			, with respect
	(name	of product)	
to the following	problem:		
Name			
Firm			
rum			

also by age groups (Table X).

Of the 508 persons reporting using a product for the first time this year, 6.3 percent listed shampoos; 3.3 percent shaving soaps and creams; 6.9 percent tooth paste and tooth powder and 1.6 percent bath preparations other than soap. These figures are given on a geographical basis and by age groups.

Percentages of those using fewer quantities of products this year than last year were given as follows: shampoos 2.0 percent; shaving soap and cream 5.1 percent; tooth paste and powder, 4.3 percent and bath preparations other than soap, 1.6 percent. Again geographical and age group figures are given.

The concluding table covering most irritating thing when shopping for cosmetics and toilet preparations. Items out of stock held top spot with 33.3 percent. Improper explanation of use was a poor second with 11.8 percent. Other causes of irritation included insufficient variety, 6.2 percent, soiled packages, 4.9 percent, insufficient number of sizes 9.1 percent, too many sizes, 4.7 percent, nothing satisfied, 8.9 percent.

Instantly Soluble Gums

A new process that renders vegetable gums immediately soluble in cold water has recently been announced by Soluble Products Co., Brooklyn. The manufacturer states that the equalized gums develop full viscosity without any special heating, aging or agitation, and that clumping and unreacted dry cores of gum are eliminated. Equalized gums are available in powdered form.

Camden Bag Expands Plant

Construction has begun on an addition to its warehouse, Camden Bag & Paper Co., Camden, N. J., announced recently. The increase will be an additional 65 percent of floor space. At the same time, the company announced that Albert F. Musgrove and W. Harry Sprackland, Jr. have been added to the sales force. Mr. Musgrove has been assigned to the industrial sales division and Mr. Sprackland, Jr. to the retail sales division.

New CSC Wax Bulletin

A bulletin describing the properties of aminohydroxy compounds and their use in the preparation of self-polishing floor waxes, cleaning compounds, and other types of wax, resin, and oil emulsions has recently been issued by Commercial Solvents Corp., New York. Copies of the bulletin are available upon request to the company at 260 Madison Ave., New York.

Seminole Supply Moves

Seminole Supply Co. recently announced it has transferred its head-quarters from 12 S. Market St. to 902 N. Myrtle Ave., in Jacksonville, Fla.

New Bobrick Dispenser

A new, all-metal, lather type soap dispenser, the "Bobrick 45," has recently been announced by the Bobrick Manufacturing Corp., Los Angeles. The exterior of the 18 fluid ounce dispenser is highly polished stainless steel and chrome-plated brass. The Bobrick 45 has a stainless steel integral push button and piston. The force pump action of the mechanism eliminates vacuum and thereby prevents any possible leakage. The inner container is transparent, shatterproof "Lustrex" plastic for extra safety. A "look-slot" on either side of the dispenser shows how much soap is in the tank. A specially provided key is required to open the lock filler top.

At the same time, the company announced it has recently published a new, two-page catalog sheet, illustrating the Bobrick line of soap dispensers, valves and tanks. This sheet is designed



to provide dealers with a ready made soap dispenser section for their catalogs. It can be obtained by writing to the company at 1214 Nostrand Ave., Brooklyn.

New Pival Brochure

A new brochure, describing "Pival" rodenticide which is also claimed to have insecticidal and fungicidal activities, was published recently by Motomco, Inc., New York. "Pival" is produced solely by Motomco, and has as its active ingredient 2 pivalyl-1, 3-indandione, or "pivalyl." Used at low concentrations, the lethal effect of these rodenticides depends upon multiple feedings of small quantities consumed over a period of days. Copies of the brochure are available upon request to the company at 10 Murray St., New York.

American Home Net Up

Net earnings for the first six months of 1953 were substantially higher, American Home Products Corp., New York, announced recently. Consolidated net earnings totalled \$6,358,086, equal to \$1.65 a share, compared with \$5,089,402 or \$1.32 a share last year.

Hooker Executive Changes

J. H. Babcock, formerly vicepresident in charge of development and research, has been named vicepresident of Hooker Electrochemical Co., Niagara Falls, N. Y. and Dr. J. H. Bruun, formerly director of research, has been appointed director of research and development, according to a recent announcement by R. L. Murray, president of the company. In his new position, Mr. Babcock, who has been with Hooker since 1916, has greater responsibilities with respect to overall management of the company. He continues as a member of the research committee of the firm and is in charge of the general developments division. In addition, licensing activities and the patent section remain in his charge.

Dr. Bruun joined Hooker in December, 1952 as director of research. He is in charge of all research and new product development activities.

Acquires Marble-Nye

Hooker Electrochemical Co., Niagara Falls, N. Y., announced recently that it has purchased Marble-Nye Co., Worcester, Mass., manufacturers' agent for chemical products. According to R. L. Murray, president of Hooker, the newly acquired firm is operating as a wholly owned subsidiary of Hooker. George J. Bruyn, formerly administrative assistant to the vicepresident and general sales manager of Hooker, is vice-president and manager of Marble-Nye, with Mr. Murray as president. Walter B. Jenkins, formerly president of Marble-Nye, continues as a member of the board of directors. Henry L. Gilson remains as treasurer and clerk.

Dow Retires Anderson

Hira D. Anderson, general traffic manager of the Midland, Mich. plant of Dow Chemical Co. retired recently after 41 years with the firm, Donald Williams, director of sales, announced recently. Succeeding him in the post is Gordon R. Anderson who held the position of assistant to the general traffic manager for the past 18 months. The Andersons are not related.

In CCC Research Post

Appointment of Dr. R. H. Crist as director of research, physical process department, Carbide and Carbon Chemicals Co., a division of Union Carbide and Carbon Corp., New York, was announced recently by Dr. G. T. Felbeck, vice-president. Dr. Crist joined the Carbide organization in 1945 and the next year was assigned to the physical processes department at Carbide's South Charleston, W. Va. plant. A 1920 graduate of Dickinson College, Carlyle, Pa., with an A.B. degree, he received a Ph.D. from Columbia University in 1927.

Continental Names Two

- - -

Appointments of managers at two plants were announced recently by Continental Can Co., New York. L. J. Michelot has been named plant manager of Continental's Clearing-Owens (Chicago) plant, and P. J. Coyne has been appointed plant manager of the Houston plant. Mr. Michelot joined Continental in 1938 at San Jose, Calif. After a succession of positions, he became general foreman and then assistant plant manager at the Oakland plant. Prior to his new assignment, he was assistant plant manager at the Chicago plant. Mr. Coyne started with Continental as plant industrial engineer, and later served at the former Wheeling, W. Va. plant and at Baltimore. Prior to his new assignments, he was plant manager at Baltimore.

Trade Marks

(From Page 79)

Chapman Chemical Co., Memphis, Tenn. Claims use since Mar. 5, 1953.

Dow-Per—This for dry cleaning solvent. Filed May 15, 1951 by Dow Chemical Co., Midland, Mich. Claims use since Apr. 4, 1951.

Penny Spot—This for spot removing preparations used on garments. Filed June 27, 1952 by Penny Spot Co., Midland, Mich. Claims use since Mar. 25, 1952.

Wabash — This for general household cleaning purposes. Filed Sept. 18, 1952 by Industrial Soap Co., St. Louis. Claims use since July 7, 1952.

Hil-Suds—This for liquid detergent. Filed Feb. 5, 1953 by Hillyard Chemical Co., St. Louis. Claims use since Dec. 1, 1952.

Amor Lustre—This for cleaning and polishing compounds for all types of floors. Filed Sept. 15, 1951 by De Goss Laboratories, New York. Claims use since Feb. 19, 1951.

T.M.F.—This for rodenticides. Filed Mar. 12, 1952 by Vineland Laboratories, Inc., Landis Township, Cumberland County, N. J. Claims use since Nov. 2, 1951.

Veg-A-Pyr — This for insecticides. Filed July 25, 1952 by Residex Corp., Newark, N. J. Claims use since July 11, 1952.

Repel-O-Stik — This for insect repellent. Filed Aug. 19, 1952 by Sintos Co., New York. Claims use since June 15, 1951.

Clippercide—This for disinfectant and fungicide. Filed Mar. 9, 1953 by King Research, Inc., Brooklyn. Claims use since Aug. 27, 1951.

Ban-X.—This for insect repellent. Filed Apr. 7, 1953 by Bridgeport Brass Co., Bridgeport, Conn. Claims use since Feb. 10, 1953.

Phyllodent — This for toothpaste. Filed Apr. 2, 1952 by Verdurin Co., Detroit. Claims use since Mar. 19, 1952.

Forall—This for synthetic detergent for washing textile materials, dishes, and for general cleaning. Filed July 29, 1952 by Beach Soap Co., Law-

rence, Mass. Claims use since Mar. 6, 1947.

Sasheen—This for liquid cleaner for rugs, and other washable materials or fabrics. Filed July 31, 1952 by Saspin Chemicals, Inc., Chicago. Claims use since Dec. 15, 1950.

Air-Zit—This for household deodorants. Filed Mar. 12, 1953 by Van Brode Milling Co., Clinton, Mass. Claims use since November, 1952.

Allexcel — This for allethrinsynergist combinations for use as insecticides. Filed Mar. 30, 1953 by S. B. Penick & Co., New York. Claims use since May 16, 1950.

Pendane—This for insecticidal formulations containing lindane for use in household insecticides. Filed Mar. 30, 1953 by S. B. Penick & Co., New York. Claims use since Apr. 8, 1950.

Lubcote—This for soap especially formulated for wire drawing. Filed Nov. 12, 1952 by Armour and Co., Chicago. Claims use since May 27, 1952.

Quick-So — This for cleaning compound for use in steam cleaners. Filed July 10, 1952 by Quick Charge, Inc., Oklahoma City, Okla. Claims use since September, 1949.

Homecrest—This for furniture, floor, and automobile polish and wax. Filed Oct. 23, 1948 by Butler Brothers, Chicago. Claims use since 1941.

Pure-sure—This for chemically treated polishing cloth. Filed Sept. 29, 1950 by Pure Oil Co., Chicago. Claims use since February, 1945.

Gee-Bee — This for aluminum alloy surface cleaner. Filed May 17, 1952 by Gee-Bee Chemical Co., Los Angeles. Claims use since June 3, 1931.

Grip Safe—This for floor wax. Filed Aug. 21, 1952 by Gerson-Stewart Corp., Cleveland. Claims use since January, 1941.

Liqui-Glass—This for polishing compound. Filed Oct. 14, 1952 by Granitize Products Co., South Gate, Calif. Claims use since May 5, 1950.

Nexa—This for household insecticides. Filed Oct. 28, 1952 by Cela Landwirtschaftliche Chemikalien G.m.b.H., Ingelheim am Rhein, Germany. Applicant claims ownership of German Registration No. 621,442, dated June 4, 1952.

Dip-Sil—This for silver cleaner. Filed Oct. 17, 1952 by G. H. Wood and Co., Toronto, Ont., Canada. Priority under Sec. 44 (d). Canadian application filed Aug. 12, 1952. Registration No. N.S. 42,094. Register 165, dated Aug. 12, 1952. The word "Dip" is disclaimed apart from the mark as shown.

Peter Pan—This for toilet soap. Filed Nov. 1, 1952 by Colgate-Palmolive-Peet Co., Jersey City, N. J. Claims use since 1910; and since Sept. 2, 1952 as to the mark shown.

Caox—This for beerstone remover for use in cleaning tanks in breweries. Filed Oct. 25, 1952 by A. Gusmer, Inc., Hoboken, N. J. Claims use since Oct. 2, 1952.

Sonitory Chemicals Section

Entries close October 15! AEROSOL FESTIVAL

best package competition

to be held in conjunction with the 40th annual meeting of the CHEMICAL SPECIALTIES MANUFACTURERS ASSOCIATION

at the Mayflower Hotel, Washington, D. C.

December 7-8, 1953

. . . competition to select best aerosol packages of the year in seven classes as follows:

- 1. Insecticides
- 2. Moth products
- 3. Room deodorants
- 4. Lacquers, paints, enamels
- 5. Other household products,—waxes, polishes, glass cleaner, etc.
- 6. Personal products, shave lather, shampoos, body deodorants, hair lacquer, sun tan oil, etc.
- 7. Miscellaneous, novelties, drugs, lubricants, etc.

. . . a top award for "best in the show" will also be made.

Entries are open to any aerosol brand owner or marketer anywhere, and are not restricted to members of CSMA. There are no entry fees or other charges to entrants.

> Send all entries to AEROSOL FESTIVAL COMMITTEE Chemical Specialties Manufacturers Assn. 110 East 42nd St., New York 17, N. Y

If you need ENTRY BLANKS, write immediately to the Committee at the above address!



● Let MM&R help you make your product a best seller. MM&R offers a complete line of Perfume Oils, Deodorscents and Neutralizers to give your product a sales-stimulating fragrance, or to mask even the heaviest basic odors.

Whatever your product, whatever your odor problem and regardless of budget limitations, MM&R's un-

rivalled Technical Service Department will gladly help you take the "m" out of "smell." Send us a sample of your "slowest seller" and see for yourself how much sales appeal MM&R can give it. Or consult your MM&R Representative.

Essential Oils, Neutralizers, Aromatic Chemicals, Perfume Oils—quality since 1895.





U.S.I.'s new ALLETHRIN plant now producing at full rated capacity

More than 15 years of laboratory work in the U. S. Department of Agriculture from 1932 to 1947 led to the successful synthesis of what is now called allethrin. Since 1947, additional research on evaluation of allethrin and production methods led to the construction of U.S.I.'s new plant at Balti-

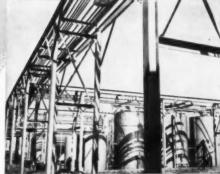
more which has now achieved design capacity production.

Thus, from a difficult recipe for an entirely new compound which requires 18 complex production steps, the research and engineering forces of U.S.I. have produced allethrin in sufficient quantities to fulfill industry's foreseeable requirements.

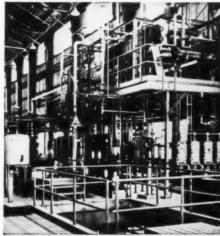
Through a maze of some 130 reactors, receivers and holding tanks, more than 91/2 miles of pipelines connecting the numerous units, and more than 100 controlling and recording instruments, nearly a million pounds of chemicals—solids, liquids and gases—are handled per month. It is the first fully integrated plant to be engineered and constructed for the production of allethrin.

The result is ample supplies of allethrin for formulating more effective and more specific insecticides. Allethrin is an important addition to the nation's supply of low toxicity insecticides and provides a new opportunity for formulators to revise their products to meet more exactly the needs of their customers.

Get the facts about allethrin and its application to your products-write to U.S.I. for full information.



view outside the plant shows the many tanks and pipes needed to supply the more than 1,000,000 pounds of chemicals required each month to feed the production line for allethrin manufacture.



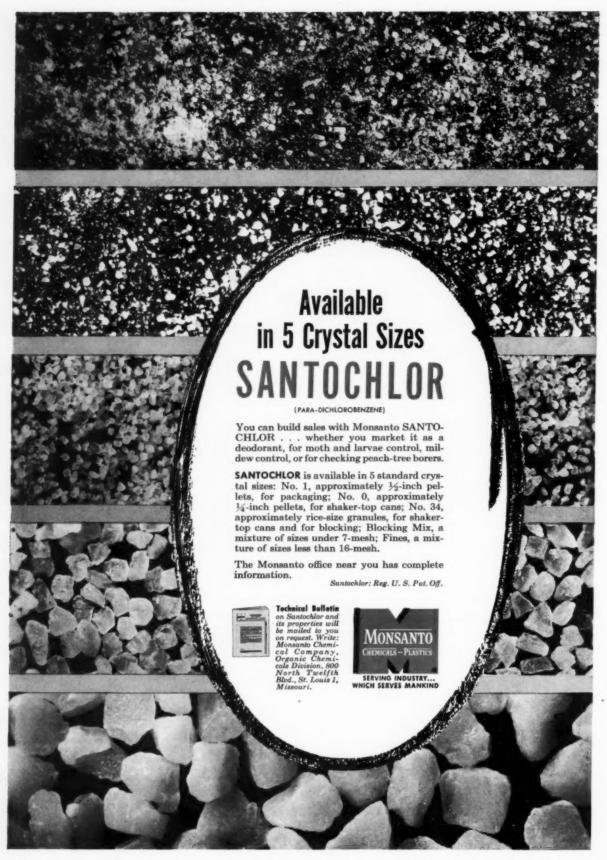
The interior view reflects the complexities of allethrin production. The equipment for recovery of solvent is shown above



Among the first to visit the new plant at full capacity were members of the U.S.D.A. staffs which had first successfully synthesized allethrin, and officials of U.S.I. as their hosts. To these people, the new plant represented the commercial realization of a laboratory dream.

U.S. NOUSTRIAL CHEMICALS CO.

Division of National Distillers Products Corporation 120 Broadway, New York 5, N. Y. Offices in Principal Cities



from the Laboratory of Aerosol Research comes the great new Engineered for both cold filling and pressure filling Easier dispensing principle lessens finger Available with internal Economical fatigue. metering orifice

Pressure-fills faster than any other valve on the market.

loading-

fewer rejects.

THE K-38 AEROSOL VALVE is literally two valves in one. A new engineering principle, discovered in our laboratory allows quicker intake and more uniform dispensing. Available with smartly designed metal or plastic protective cover.

Aerosol Research Co.-pioneers in the manufacturing of aerosol valves and originator of the two-piece paint valve—is constantly working to bring better valves to the aerosol field. A complete staff of qualified research personnel is ready to help you solve your aerosol problems. We invite your inquiry. Samples and prices sent on

in 4 sizes012, .0135, .016, .020

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For Better Protection against Pests...

Use these PRENTOX Pest-Tested Basic Insecticide Concentrates

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Wettable and Dry Powders Oil Concentrates Emulsifiable Concentrates

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Oil Concentrates Wettable and Dry Powders Emulsifiable Concentrates

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Powder No. 20 Extract

RAX POWDER

A Rodenticide Containing 0.5% Warfarin



Prentiss Drug and Chemical Co., Inc.

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SOME CLOUDS BRING

trouble!



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A multitude of products are sold today in the modern aerosol container. The efficiency, practicability, and appeal of this remarkable package have again and again been proven.

But with the free dispersion of product into the aerosol cloud, a formerly unnoticed objectionable odor is magnified many-fold, often into a real disadvantage. Cosmetics, paints, insecticides, waxes, can be effectively improved odor-wise for aerosol packaging.

The chemists of van Ameringen-Haebler, Inc. have had long and successful experience in the improvement of many products. They can help you turn scent into a real selling force.

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There's no substitute for EXPERIENCE!

After furnishing formulae for over 30 million aerosol bombs and millions of gallons of spray we feel we know something about allethrin.

As pioneers in both the production of pyrethrum and the processing of allethrin we also know the possibilities as well as the limitations of both.

In addition, our MGK Super-Synergist 264 has definitely attained a position of proven compatability and high efficiency when used with pyrethrins and allethrin*.

LET EXPERIENCE RE-EXAMINE YOUR FORMULA

With our fund of experience we feel qualified to suggest formula improvements and formulating short cuts. Many manufacturers have substantially increased their profits by asking for our suggestions.

WITHIN 3 TO 5 DAYS WE WILL TELL YOU

It takes just a few days for our experts to check your present formula. Their analysis will show whether we can redesign it to save you money—and how much you can save. Please address your inquiry to Dr. J. B. Moore at our laboratory.

*MGK Super-Synergist 264 has been approved for use by United States Military Forces.

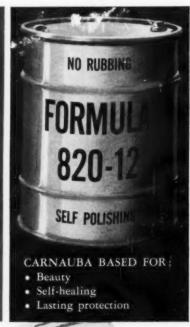
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AMAZING NEW HOUSEHOLD INSECT KILLER

HOW TO USE

Remarkably simple to use and unbelievably effective, the Bug Bulb provides a new method for killing insects in the home and other small indoor spaces. Vaporization is the principle of operation with the vapor permeating all parts of the room being treated and leaving a microscopic residue that is lastingly lethal to most insect life. Bug Bulb, a specially designed electric bulb (110v-40v) is screwed upright in an ordinary lamp (remove shade during operation) and Bug Bulb tablets are placed in the dimple in the top of the bulb. The number of tablets used depends on the size of the room. Genuine Bug Bulb tablet ingredients are 100% active (no inerts, solvents or carrying agents). These tablets are sealed in an airtight pharmaceutical packet and one packet will last for an entire month when used as directed in a 12' x stoom. For smaller spaces (kitchen, bath, clasets, etc.), the packet of tablets lasts even longer. It is important to note that you don't have to chase and look for the insects to spray or kill them. All you have to do is screw Bug Bulb into your lamp, drop in the tablets and switch the lamp on. You leave the room and the Bug Bulb does the rest. This is truly a scientific advancement in the war against the menace of disease vectors and nuisonce insects. Be sure te follow operating instructions on Bug Bulb carton or tablet packet.

KILLS EXPOSED YEAR-ROUND INSECTS

Silverfish and Ants Moths and Crickets Spiders and Centipedes Fleas and Gnats Clover Mites

Roaches and Waterbugs Flies and Mosquitoes Wasps and Hornets Carpet Beetles **Night Bugs**



FREE... Two packets of ganuine tab-lets, valued at 98c included with each unit purchased.

RETAIL PRICING

The BUG BULB and BUG BULB tablets are "fair-traded" and a minimum retail price of \$2.98 and \$.49 per packet respectively will prevail. However, in the interest of providing an equitable arrangement that will help defray higher shipping costs to dealers in the western states, our national advertising will indicate that retail prices are "slightly higher west of the Mississippi River." We are accordingly suggesting that dealers in this region uniformly retail the BUG BULB at a price of \$3.19 each but maintain the tablet packet price at \$.49.
The additional markup on the BUG BULB as supported in our advertising should be ample for covering excessive shipping costs for both items. For many valid reasons we consider the expendable tablets to be adequately and properly priced and consequently recommend against increasing the \$.49 minimum retail price. All prices higher in Canada and the

SUGGESTED APPLICATIONS

All small indoor areas including: Homes and apartments — every room. Garage, attic, closets. Commercial, industrial and service rest rooms. Vacation cottages and camps Hotels, motels, resorts, inns. Farms, boats and trailers. Small stores and stands

USE THE CONVENIENT ORDER BLANK

BELOW TO OBTAIN THE OFFER DESCRIBED

IN THE OPPOSITE BOX -

IT IS ECONOMICALLY POSSIBLE FOR US TO PROCESS THIS SPE-CIAL INTRODUCTORY OFFER ONLY ON A PRE-PAID OR C.O.D. BASIS.

OUR STANDARD DISCOUNT SCHEDULE WILL BE SENT TO YOU WITH YOUR ORDER.



TAKE ADVANTAGE OF THIS SPECIAL INTRODUCTORY



For your initial sample order of one display carton of six Bug Bulbs and one display carton of twelve packets of genuine Bug Bulb tablets we will extend a full 33 1/3% discount.

AND

we will charge for only 5 while shipping 6

we will pay shipping charges Your total cost, therefore, for one each of these salesmaking display cartons is only \$13.82 delivered - giving you better than a

45% MARKUP!

AMERICAN AEROVAP INC.

170 W. 74th STREET, NEW YORK 23, N. Y.

GENTLEMEN: PLEASE RUSH TO US YOUR SAM-PLE ORDER OF ONE DISPLAY CARTON EACH OF BUG BULBS AND TABLETS, SPECIALLY PRICED AT \$13.82.

\$13.82 ENCLOSED..... SEND C.O.D.....

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SSC 9-53

SEPTEMBER, 1953

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to assure

SCUFF-RESISTANT FILMS HIGHEST GLOSS MAXIMUM DURABILITY

at lower raw-material costs with simplified formulae

CARDIS-ONE gives you and your product still more unrivalled advantages:

- · hardest emulsifiable petroleum wax on the market
- · gives films a deeper, richer gloss
- available for prompt delivery 24 conveniently located distribution points are at your service
- Cardis-One is produced at the Warwick Wax Refinery, Chanute, Kansas...home of Cardis Waxes, America's most widely-used emulsifiable petroleum waxes.

the only emulsifiable petroleum wax with

PENETRATION ONE-TWO

(melting point 195°-200°F)

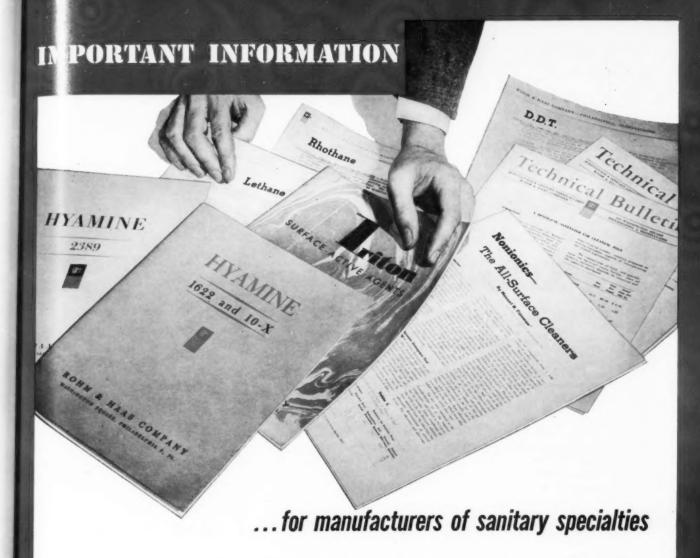
For samples, specifications, suggested formulations, technical service, write

118





10th STREET AND 44th AVENUE. LONG ISLAND CITY, NEW YORK



Research men at Rohm & Haas have much practical information to help you—obtained in the laboratory and in the field during more than 25 years fighting insects and bacteria; developing detergents and emulsifying compounds for the formulators of sanitary specialties. The products they have created—insecticides, bactericides and surface active agents—are a result of what they have learned during this time.

In addition, Rohm & Haas scientists have developed many methods for accurately evaluating sanitary chemicals. The Peet-Grady test is a standard procedure for evaluating insecticides. The "Dynamic Detergency Test Method" for measuring hard surface detergency is the latest Rohm & Haas method to gain widespread recognition for evaluating detergent compounds.

Rohm & Haas makes the knowledge gained from its many activities available to all its customers. If you have problems in developing cleaners, sanitizers, or insecticides, give us a call—a Rohm & Haas technically trained representative will be happy to help you. We'll also put you on our list to receive reports of our continuing research in sanitary chemicals.

TRITON surface active agents aid dirt and grease removal, speed wetting and rinsing.

HYAMINE is an odorless, effective bactericide which in "use" solutions is non-corrosive, non-irritating, and stable.

LETHANE in aerosol mist, fog or liquid spray formulas gives fast knockdown of insects on contact, cuts manufacturing costs.

DDT, for dependable concentrates for spraying and dusting.

RHOTHANE—an analog of DDT, controls mosquitoes and other insects, is safer to warm blooded animals.

TRITON, HYAMINE, LETHANE, RHOTHANE are trade-marks, Reg. U.S. Pas. Off. and in principal foreign countries.



FOR INDUSTRY

ROHM & HAAS

WASHINGTON SQUARE, PHILADELPHIA 5, PA.

Representatives in principal foreign countries

How to Be Sure the Air is pure...

ORBIS

"Aquaspray"
Perfume Oils
that need no alcohol

Air is so easily purified with Orbis "Aquaspray" Perfume Oils. Deodorizing is simple, fast, and most inexpensive. Three ounces of "Aquaspray," mixed with 3 ounces of Formaldehyde Solution U.S.P. and enough

water to make a gallon, give a permanent milky-emulsion spray that does a thorough deodorizing job for less than 38 cents a gallon. Where can you match such economy?

SEND FOR SAMPLE SUFFICIENT TO MAKE 1 QUART CHOOSE FROM THESE ODORS . . .

Apple Blossom Bouquet Kashmiri Bouquet #550 Carnation Cedar Cedarleaf Cedarwood Gardenia Honeysuckle Jasmin Lavender Lilac Locust Blossom Mint Narcisse New Mown Hay Orange Blossom Oriental Spice Persian Bouquet

Pineneedle Rose Syringa Trailing Arbutus Violet Wintergreen

PRICE: \$2.00 per pint, \$14.00 per gallon

COSMETIC RAW MATERIAL WATER SOLUBLE GUMS FOOD COLORS PERFUME BASES

ESSENTIAL OILS FRUIT FLAVORS QUINCE SEED OLEO RESINS STEARIC ACID WAXES THYMOL AROMATICS ORBIS
PRODUCTS
CORPORATION

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NEW YORK

CHICAGO BOSTON MEMPHIS



Your own appreciation for your product is quickly reflected in your choice of a container. Why "kill" sales with a bug-duster of questionable design and quality. The new patented R. C. Spra-Can incorporates many exclusive features — specifically designed in answer to past consumer objections to inferior, make-shift dusters. R. C. Spra-Can offers Controlled Powder Pressure . . . Special Clog-Proof Feed Construction . . . Countersunk Nozzle-Vent for spray uniformity . . . Sturdy Bellows Diaphragm built to "take-it," even under roughest usage . . . Moisture-Proofed Stock to assure free pumping action at all times, in all climates.

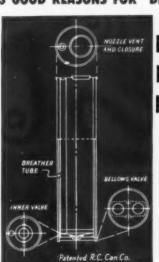
3 GOOD REASONS FOR "DRESSING" YOUR BUG-KILLER IN THE R.C. SPRA-CAN:

Sprays at Any Angle — Upside Down, Sideways.



Uniform Spray - No "Puffs" or "Blasts."

Years of constant research and engineering know-how have earned for the R. C. Can Company the title of "Product Tailors" for industry. Why not put your next packaging problem in our hands — your assurance of exacting quality, added sales appeal, and continued customer satisfaction.



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NOW OFFERED TO MANUFACTURERS IN 50% CONCENTRATION

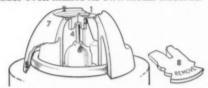
Sample and literature on request

Branches in principal cities throughout the United States. SCHRADER TRIPLE-TESTED VALVES MEAN LOWER REJECTION RATES

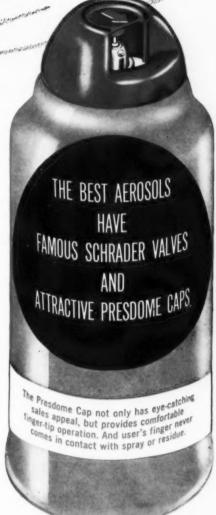
Aerosol loaders who have used vast numbers of Schrader Valves have found lower rejection rates, because Schrader Aerosol Valves receive the most thorough inspection. They're triple-tested . . . every critical component part 100% machine tested for correct tolerances. Low rejection rates mean lower costs. And the elimination of 'dud' returns from retailers protects the reputation of your product.

No Aerosol Product is Better than its Valve—No Valve is Better than Schrader's

Schrader produces Aerosol Valves with fully automatic machinery . . . maintaining complete control of production, because nothing but raw materials are bought outside. Schrader even makes its own metal closures.



- 1. Arrow points clearly to direction of spray
- 2. Flexible operating portion of Presdome is countersunk
- 3. Solid button recessed for valve pin
- 4. Valve pin designed for positive spray shutoff
- Solid plastic dome grips closure shoulder permanently
 — no slipping or turning
- 6. Famous Schrader seating principle is used in the valve
- 7. Caps available in various colors to match your label . . . by request
- 8. Special tamper-proof locking tab is available





AEROSOL VALVES made by the

manufacturer of the Standard Tire Valve since the first Automobile

Use our research facilities to develop a superior Aerosol package. Send for samples and further information.

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Division of Scovill Manufacturing Company, In	ncorporated		
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Refined (Dewaxed) Bleached White Shellac is
Synonymous with Quality and Uniformity!

Its Low Acid Number Requires a Minimum of Alkali.

Dissolves Rapidly and Completely.

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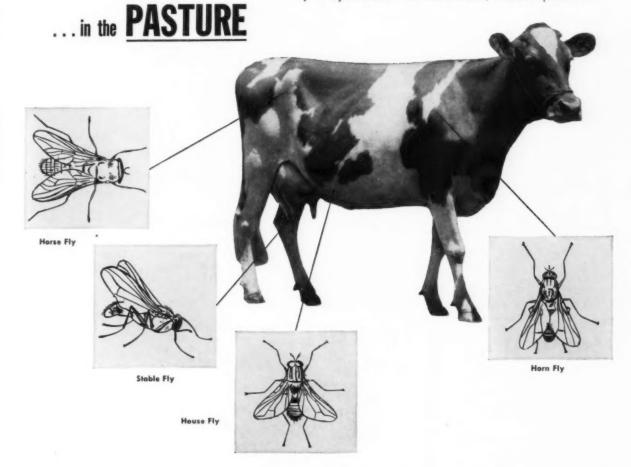
A FLY REPELLENT THAT WORKS

...in the BARN and

CRAG FLY REPELLENT (butoxy polypropylene glycol) can add new sales appeal to your cil-based, emulsifiable or automatic-sprayer formulations. Because of its repellent and synergistic properties, CRAG Fly Repellent-toxicant combinations provide economic protection against flies both in the barn and pasture.

CRAG Fly Repellent offers other benefits as well. It is a solvent for all ingredients commonly used in animal sprays. If cloudiness, separation or settling is a problem in your present formulations, try CRAG Fly Repellext as a coupling agent to improve appearance and storage characteristics.

START NOW to give your dairy and livestock sprays improved performance with this colorless, odorless repellent.



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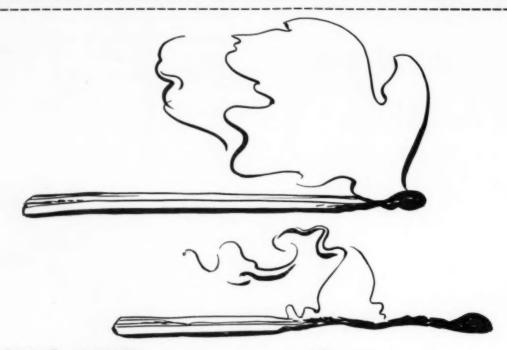
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Durez meets your requirements

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DUREZ 219 RESIN A terpene phenolic, oil-soluble, low-viscosity resin of terpene phenolic type. Compatibility is excellent with carnauba and candelilla waxes and very good with microcrystallines.

DUREZ 225 RESIN. Thermoplastic phenolic type, widely used as component in heavy-duty emulsion waxes. Imparts excellent slip resistance, water resistance, and hardness to the product.

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DUREZ 13540 RESIM. Used directly in the wax kettle in replacement of 25% to 50% of wax. Produces emulsions having good gloss, stability, leveling and non-slip properties, and water resistance.

DUREZ 14140 RESIN. Designed as a partial replacement for vegetable waxes, and as a hardening agent for emulsifiable microcrystallines. Films may be buffed to unusually high luster and slip resistance.

 The first phenolic resins to give complete satisfaction in wax blends were developed in our laboratories by working closely with norub liquid polish manufacturers. These resins produced such outstanding results that they have long been standards in the industry. They fall into two classes . . . high melt and low melt . . . both of which produce emulsions with unsurpassed shelf and film properties. The second group melt at about 90°C, enabling manufacturers to do their own blending in standard steam-jacketed kettles. Whichever method you use, whatever market you now have in mind, let us help you get the best results . . . with economy in time and money. Durez Plastics & Chemicals, Inc., 409 Walck Road, North Tonawanda, N. Y.



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Germ Killer Sales Builder

High germ-killing power...
increased sales-building power.
These are the twin reasons why
formulators are using Santophen
1 in disinfectants, laundry detergents, rug shampoos, cleaners
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Santophen 1 is available as a flaked solid or as a concentrated solution in isopropanol. Santophen 1 is a single stable compound with a purity of over 98 %. It is a potent bactericide with phenol coefficients of 150 to 200 against standard test organisms. It is easy to handle, light in color, nonstaining in solutions.

Mail the coupon for more information on how Santophen can help build your sales.

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Gentlemen:

Please send new booklet, "Santophen 1 . . . A Germicide."

Name.....Title

Name.....Title

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City......Zone....State..

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FOR BETTER DEODORIZATION



A New Absorbent Ceramic for Aromatic Impregnation

Will gradually release absorbed liquids or impregnated perfumes by evaporation



STRONG CLEAN **ECONOMICAL**

Widely used and accepted in odor control devices and deodorization machines

> Can be molded in various shapes to suit customers' specifications

> > We invite your inquiries. Samples sent on request.



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"SHELF-STABILITY"

FOR NO-RUB WAXES WITH **MANTROSE** *65 REFINED WHITE SHELLAC

GLOSS WATER RESISTANCE DURABILITY LEVELING ANTI-SLIP

> Leading manufacturers of water emulsion waxes and polishes have adopted Mantrose Shellac because of its high quality, uniformity and stability.

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first with G-4!

is Baird & McGuire

what is it?

S. D. CEBANER

First again is Baird & McGuire! This time with their new "S-D Cleaner," for "S-D Cleaner" with G-4 sanitizes as it deodorizes as it cleans... and how it cleans!

G-4 is the new germicidal ingredient recently discovered and perfected which possesses remarkable sanitizing and deodorizing properties.

"S-D Cleaner" with a coefficient 3, sanitizes, deodorizes and cleans in one easy, economical and complete operation! . . . If water won't harm it, "S-D Cleaner" with G-4 will clean it! And, it is non-irritating and non-toxic.

"S-D Cleaner" is compounded for hospitals, schools, public buildings, kennels, bakeries, dairies, canning plants, candy factories, homes, wherever a complete cleaner is needed. And, "S-D Cleaner" is superior for all types of floors!

"S-D Cleaner," unlike many other cleaners, is a combination of three different detergents. One possesses remarkable cleaning properties, the second will produce rich, copious suds, while the third is an unusual wetting agent.

"S-D Cleaner" suds can be mopped up in a jiffy, and leave a soft sheen with No Slip-periness!

"G-4" has amazing germicidal activity against both dirt and disease and its qualities as used in "S-D Cleaner" by Baird & McGuire offer you a superlative cleaner . . . not claiming, but doing three important jobs at the same time.

Yes, "S-D Cleaner" is a cleaner that does not mask odors, but absorbs and works to eliminate their cause.

BAIRD & McGUIRE, INC.
Holbrook, Massachusetts

"CREATORS AND COMPOUNDERS OF THE BEST IN CLEANERS AND DISINFECTANTS FOR OVER 43 YEARS"



General offices and shipping facilities are housed in modern two-story structure above.

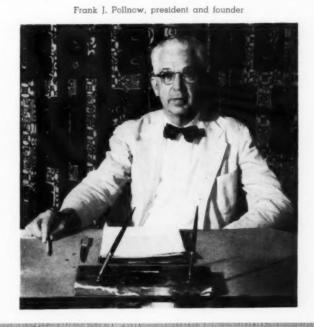
40 Years of Sanitary Supplies

ESTAL, INC., St. Louis sanitary chemical manufacturing company, this month begins its 51st year. One of the more successful firms in its field, Vestal traces its origin back to a 21-yearold bicycling enthusiast, named Frank J. Pollnow, who, in August, 1913, began the operation of a liquid hand soap manufacturing business known as Vestal Liquid Soap Company. Savings from the earnings he received while working for a St. Louis brewery during his high school years and later as a men's apparel salesman constituted his share of the capital requirements of the embryo enterprise.

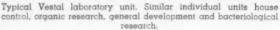
The original partners plus one salesman constituted the sales force. Although an office girl assisted in clerical matters, all other functions of the new business including production and shipping were performed by the partners on a make-the-demand, then meet-the-demand basis.

As a means of transportation and as a sport, young Frank Pollnow rode a bicycle, participating in the activities of the St. Louis Cycling Club which included pleasure trips through the picturesque Ozark hills

Vestal, Inc., St. Louis, rounds out 40 years of steady growth by adding new production, laboratory facilities









Controlled temperature and humidity laboratory (viewed through double glass window)—for physical testing under various atmospheric conditions.

as well as cross-country competitive races. Several trophies from his successful races rank high among his cherished possessions today. Mr. Pollnow still occasionally attends social functions of the cycling organization. On many nights of what was frequently a seven-day week, he rode his bicycle several miles between his home and the 50 gallon gas-fired kettle which was the nucleus of the original Vestal soap factory. To conserve valuable selling time, the product frequently had to be made during odd hours.

Pollnow Becomes President

N 1917, Frank Pollnow bought his
partner's interest and became prespartner's interest and became president of the newly formed corporation of Vestal Chemical Company, Inc., which position he holds today. Shortly thereafter, he was joined by his brother, William F. Pollnow, who assumed the manufacturing duties of the young corporation, and later became secretary-treasurer.

A resume of the early days and those who contributed to the ultimate success of Vestal would be lacking indeed without mention of the bookkeeper who performed her duties for many years at night as an additional chore to the unreckonable duties of raising a family. This was the contribution of the president's cooperative, energetic wife, Clara A. Pollnow, in the days when any savings in time or payroll counted heavily.

In 1929, during the first period of extensive sales expansion, Vestal Chemical Laboratories was formed as a subsidiary sales organization to the parent manufacturing firm, Vestal Chemical Company. In the latter years of World War II these concerns were renamed Vestal, Inc., and Vestal Laboratories, Inc., respectively, under which they operate today. In the first several years of operation liquid hand soaps were the only product made by Vestal. Later, in 1918, manufacture of a floor cleansing compound enlarged the business scope of consumers, who up to that time consisted primarily of physicians, dentists and hospitals.

The introduction in 1924 of a specialty liquid soap for floors and of water emulsion waxes in 1926 marked the origin of what was to become a diversified line of sanitary chemical specialties, tailored for floor maintenance. This is currently one of Vestal's major fields of activity. Also during the Twenties the addition of hospital, institutional and industrial germicides broadened the Vestal product line.

Since its origin, Vestal has expanded its position in the hospital field with liquid soaps, specially suited for surgical and medical uses, and through the development of hospital germicides. Culminating a six year period of research aimed at improving the anti-

Frank J. Pollnow, Jr., exec. V.P.



William F. Pollnow, Secy.-Treas.



J. L. Martine, Sales Vice. Pres.



SOAP and SANITARY CHEMICALS



Section of the Vestal bacteriological laboratory.

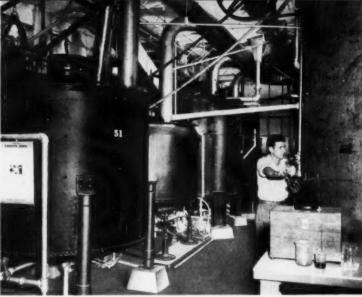
septic value of soaps, Vestal claims to be the first to introduce a surgical soap with residual antiseptic effect. Under the widely known brand name, "Septisol," now used in many of the large hospitals, as well as in physicians' and dentists' offices throughout the U. S.

In 1927 Vestal began manufacturing pneumatic, foot operated dispensers under the direction of another brother. Charles F. Pollnow. who died July 9, 1953, after having been with the firm since 1930. More than 20,000 of these dispensers are in use in surgeons' scrub rooms today. In the middle Thirties the mechanical products department was expanded by adding the manufacture of floor scrubbing and polishing machines.

Today's Products

PRODUCTS manufactured by Vestal today include, in addition to those mentioned, oleoresinous finishes for wood floors; emulsified resin and wax-based coatings for floors and other finishing applications; numerous soaps and synthetic detergent products for floors, skin cleansing and other special applications; synthetic phenolic and quaternary ammonium germicides. Other than soap dispensers and floor machines, sale of janitor supply equipment and other items not manufactured by the company is limited to those essential to the use of the company's floor maintenance products and comprises less than five percent of the company's total sales volume.

In 1952 Vestal began the manufacture of synthetic organic chemicals. First to be produced were



Bank of process kettles (above) in Vestal plant.

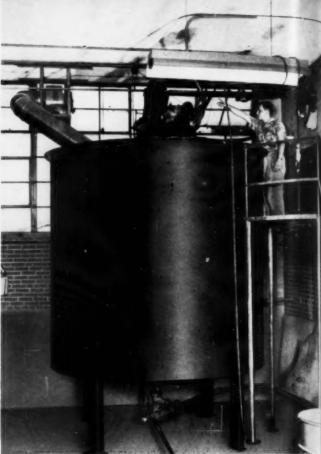


Vestal bulk filling department (above) located between tank storage and finished product storage. Each product is conducted into this area through its own individual pipe line.

General view (below) of the combined finished product area and shipping consolidation area.







Small package filling area in Vestal plant

Soap processing kettle in the Vestal plant

organic sequestering agents based on ethylene diamine tetra-acetic acid. Captive use requires the bulk of present processing capacity, but Vestal plans facilities for manufacturing these and other organic chemicals in volume which will permit marketing of the non-formulated organic specialties. Such products are the outgrowth of a policy of diversification as well as a step toward becoming as basic as possible in the manufacture of its sanitary chemical products.

Physical Expansion

DURING the initial stages of its development, until 1930, as space requirements increased, Vestal occupied successively three rented buildings in the downtown St. Louis area. In 1930, the company moved to the west central section of the city where it built a three-story fireproof building tailored to its manufacturing requirements. Additional construction, delayed by World War II, was completed on this site in 1946. Continued growth of the business necessitated a large addition, which was completed in

1951. It houses new offices, warehousing and space for new laboratory facilities currently under construction.

Sales History

IN the late 20's and 30's, Vestal's sales operation became national in scope. Today 65 full-time salesmen represent Vestal in every state of the union. Sales in some U. S. territorial possessions are handled through local distributors.

In 1927, an Eastern sales and warehousing branch, now located in Jersey City, N. J., was opened in New York City. Vestal now operates 11 branch warehouses in major cities throughout the U. S.

The major area of Vestal's sales activity consists of direct selling to hospitals and to the larger industrial, institutional and commercial consumers of sanitary maintenance products. In addition the company maintains a retail merchandising organization for the sale of "Wax-Rite," a self-polishing floor wax for household use and a surgical and dental dealer sales department.

General view of the palletized storage area



Who's Who at Vestal

TILLIAM F. Pollnow, secretarytreasurer and a director, is a brother of F. J. Pollnow. He started to work permanently at Vestal in 1917, after having served an apprenticeship during his school days. In the early era of the business he was sole operator of the production and shipping departments. Currently, in addition to his duties as secretarytreasurer, he administers controller and purchasing functions.

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Six of the eight production employees of 25 years ago are active in the present Vestal manufacturing operation. Twenty salesmen have more than 10 years of service. Of these, 15 have been representing Vestal for more than 15 years and some have more than 20 years of service. Vestal employees total 130, having an average company service record of 71/2 years.

Vestal is a closed corporation with the controlling interest owned by Frank J. Pollnow, William F. Pollnow and their families. Sales have increased each year except two since the founding of the company. Operations have been profitable with the exception of one year in the depression of the early thirties. Vestal enjoys one of the highest credit standings in the industry. Profitable operations and a conservative financial policy are reflected by a sound financial structure in which a current assets-to-liabilities ratio in excess of three to one has been steadily main-

Manufacturing Facilities

ESTAL stresses rigid control in V its manufacturing operation from raw material through the plant to finished products. Each lot of raw material is given a serial number, sampled and analyzed for conformance to purchasing specifications before release for use in production. A perpetual inventory system is maintained.

Liquid or liquifiable raw materials are received in tank cars and stored in outside tanks. Solid raw materials are purchased whenever possible in palletized car loads, which permits rapid unloading and transfer by

fork lift truck to storage areas. Similarly, empty containers are palletized for economical handling and compact storage.

Process instructions issued by the superintendent's office designate raw materials by individual tested lot made possible through the inventory control system. Charging of liquid materials is performed without manual handling through pre-set, volumetric meters which print quantity delivered on the process ticket, thus providing a check on accuracy. Similarly, batch weights of solid ingredients are recorded for rechecking pur-

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The filling department consists of a small package filling area where one-gallon and smaller containers are filled by standard semi-automatic machinery and placed on conveyor lines for transfer to the shipping floor; and a relatively large bulk filling area where most of Vestal's filling operations are carried out.

The bulk filling area occupies a long relatively narrow "corridor" between the empty container storage area and the shipping floor. All liquid products are piped to this area through individual pipe lines. For filling, containers are moved from empty storage directly to the bulk filling floor, filled

(Turn to Page 151)

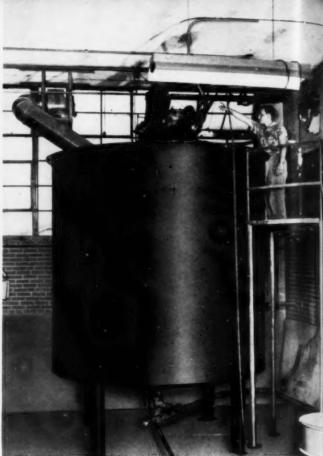
Vestal parcel post and express packing area



Bags of carnauba wax in the wax storage area







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(Turn to Page 151)

Vestal parcel post and express packing area



Bags of carnauba wax in the wax storage area



ISOTOPES ARE ATOMS OF AN ELEMENT

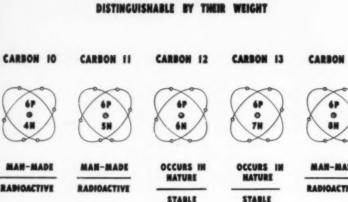


Fig. 1 A diagrammatic illustration of the stable and radioactive isotopes of carbon (Courtesy of the Isotopes Division, USAEC).

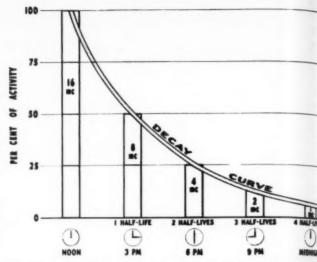


Fig. 2. A diagrammatic picture of the meaning of half-life. (Courtesy of Isotopes Division, USAEC).

Radioactive Tracers in Inse

HE many recent chemical discoveries for the control of insects and related anthropods have resulted in increased interest in new techniques for solving some of the problems associated with these developments. One of the newest techniques in insecticide research is the use of isotopically labeled compounds to investigate the biological processes, chemical reactions, and physical phenomena related to the mode of action of insecticides. It is somewhat incorrect to designate the use of tracers in this field of research as "new" because as long ago as 1931, Campbell and Lukens (8) reported the use of a radioactive indicator to study the solubility of lead arsenate within the alimentary tract of the silkworm.

In using tracers, either stable or radioactive isotopes can be used in any desirable chemical form, but in the case of radioactive tracers, the amount used must be so small that the radiations will not interfere with the natural course of the process under study. Generally, this latter precaution is of little concern in working with labeled insecticides since the toxicity of most of the newer insecticides currently under investigation is a more limiting factor than the biological effects of radiation from the labeled molecules. Most of the applications of tracer methodology to insecticide research have been made with radioactive isotopes. However, this emphasis on radioactive tracers should not exclude a consideration of stable isotopes for solving certain problems. Stable isotopes have been used in exploring an insecticide research problem in at least one case, Trenner, et al.

A detailed development of concepts peculiar to tracer methodology lies beyond the scope of this paper. It is hoped what follows, however, can provide a sufficient introduction or review of certain basic principles in the field of radiochemistry to enable the reader to understand more easily the review of applications of tracers cited later in this paper. It is hoped also that this review will indicate some of the potentialities and limitations of tracer methodology as applied to insecticide research.

The application of tracers to biological problems, such as the mode of action of insecticides, does not depend altogether on a detailed knowledge of the physical background of tracer methodology. Furthermore, this type of research frequently is conducted by a group of workers that includes members who are familiar with the details of biology, chemistry, and physics. For those research workers who desire information on the basic nature of tracers and the fundamentals

of atomic physics, there are a number of references available. The books by Calvin et al. (7), Friedlander and Kennedy (21) Kamen (47), and Siri et al. (69) are especially valuable in this respect. Many of the uses of radioisotopes in insecticide research have been reviewed by Jenkins and Hassett (41), Lindquist (50), and Dahm (11).

Properties of Radioisotopes

REFERENCE has been made already to the term isotopes; essentially, isotopes are atoms which vary in nuclear mass but not in chemical nature. Most of the natural occuring elements consist of a mixture of stable isotopes. Radioactive isotopes or radioisotopes are unstable atoms which continuously undergo a process of atomic disintegration or decay to stable atoms by the liberation of energy and the emission of alpha, beta, and gamma rays. The stable and radioactive isotopes of carbon are shown diagrammatically in Figure 1. When a small quantity of a radioisotope is used to follow a biological or chemical process it is called a radioactive tracer. Since the stable and radioactive isotopes of an element have essentially the same chemical properties, and the radioactive ones are readily detected, the movement and behavior of the stable atoms can be traced by following radioactivity. In this case, the compound under observation is said to be labeled with the radioactive isotope.

Radioactive disintegration or decay and the energy of the radiation emitted are characteristic functions of a given radioisotope. For a single radioactive substance, the decay curve or rate of decay is exponential and follows the equation:

atoms at time "t", $N_o =$ the number of radioactive atoms at time zero,

and λ = the characteristic disintegration or decay constant for that atom.

For a sample containing more than one

ally an important consideration in experimental planning. The energy of the radiation emitted by a radioisotope may be expressed in terms of the absorption of the energy by matter and may be defined in terms of halfthickness, du which is usually expressed in the dimensions of mg./cm.2.

The curie is the most common unit for expressing radioactivity and is generally accepted to be equivalent to 3.7 X 1010 disintegrations/second (d/sec). The millicurie (mc), which is equivalent to one-thousandth of a curie or 3.7 × 107 d/sec, and the microcurie (µc), which is equivalent to one-millionth of a curie or 3.7 X 104 d/sec, are more commonly dealt with in biological work. For purposes of subsequent discussion, some additional terms need defining.

The specific activity of a radioisotope is the total radioactivity of a given isotope per gram of the radioisotope. A carrier is an isotope or the normal isotopic mixture of an element which is mixed with radioactive atoms of the same element in such form that it undergoes the same chemical reaction. Carriers are often added deliberately for radiochemical purposes. A radioisotope of an element is said to be

cticide Research Associate Professor of Entomology Department of Entomology, Kansas State College

By Paul A. Dahm* Manhattan, Kansas Part I

PILE PRODUCTION OF RADIOISOTOPES

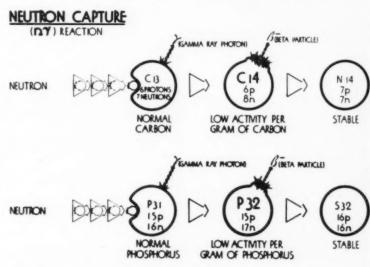
kind of radioisotope, it follows that the decay curve will represent the sum of the decay curves for the individual atoms. The half-life of a radioisotope can be defined simply as the time in which the amount of the radioisotope is reduced to half of its initial value. The half-life of a radioisotope can be expressed mathematically by the relationship:

t₁₄ = 0.693

where: t_{i_0} = the half-life of a particular radioisotope, usually expressed in seconds, minutes, days or years,

and λ has the same definition as that given above.

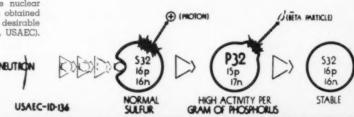
A diagrammatic portrayal of half-life is shown in Figure 2. There is considerable variation in the half-life of radioisotopes; for example, two of the most commonly used radioisotopes, Pse and C16 have half-lives of 14.3 days and about 5700 years, respectively The half-life of a radioisotope is usu-



(ID D) REACTION

(F) (MOTON) GIBETA MATICLE HIGH ACTIVITY PER STABLE NITROGEN GRAM OF CARBON

Fig. 3. Examples of neutron bombardment of stable isotopes in the nuclear fission reactor to produce radioisotopes. The higher specific activities obtained through the process of transmutation would make this the more desirable method for the reactions illustrated (Courtesy of the Isotopes Division, USAEC).



¹ Contribution No. 613, Department of Entomology. Some of the research included in this paper has been supported in part by the Division of Biology and Medicine, U. S. Atomic Energy Commission, Contract No. AT(11-1)-200; the Insecticide Department, American Cyanamid Company; and the Gulf Research & Development

^{*} A portion of this article was presented as a paper at the 39th mid-year meeting of the Insec-ticide Division, Chemical Specialties Manufac-turers Association, Chicago, May 18, 1953.

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the two principal ways radioisotopes are used. (Courtesy of the Division, USAEC).

ADD KNOWN AMOUNT
OF ELEMENT 'A' AND ITS
RADIOISOTOPE 'A' TO

BIOLOGICAL
CHEMICAL
OR
PHYSICAL REACTION

ADVANTAGES:

- I RADIOCHEMICAL ANALYSIS ALONE SHOWS AMOUNT OF 'A' IN EACH PRODUCT
- 2- SENSITIVITY IS 10 GRAMS FOR SHORT-LIVED ISOTOPE

LIMITATIONS:

I - COMPLETE CHEMICAL SEPARATION REQUIRED FOR RADIOCHEMICAL ANALYSIS

Fig. 5. A diagrammatic illustration of the use of radioisotopes for distribution and mode of action studies. (Courtesy of the Isotopes Division. USAEC).

carrier-free if all the atoms of the element that are present are also atoms of this radioisotope; this ideal is usually only approached and "carrier-free" is frequently used to mean no added carrier.

The nuclear fission reactor, commonly called only reactor or pile, has provided a supply of moderately priced radioisotopes which have in turn greatly stimulated the experimental use of tracers. In the reactor, stable isotopes are bombarded with neutrons to produce radioactive isotopes. Two processes are available in pile production of radioisotopes, neutron capture or activation and transmutation. The latter process has been called modern alchemy by some. Both processes are illustrated in Figure 3. In general, radioisotopes produced by neutron bombardment are available in two forms, irradiated units, which are unprocessed irradiated target materials, and processed radioisotopes, which are, except in one or two cases, purified and analyzed solutions. One frequently has a choice of the two forms and must consider his experimental requirements before purchasing.

There are a number of important criteria to consider in experiments involving tracers: (a) radiochemical purity, (b) the radioisotope should be present in a single chemical state, (c) the possibility of exchange error should be eliminated, (d) know the degree to which the isotope is distributed among other chemical compounds, (e) avoid isotope effects, (f) avoid chemical effects, and (g) avoid radiation effects. And in common with all experimental techniques, the use of trac-

ers must provide economy of time and effort, economy of radioactive materials, and the desired degree of accuracy.

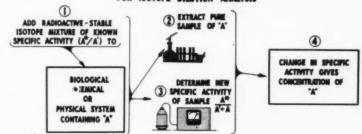
Radioisotopes are useful both as sources of radiation and as tracer atoms (Figure 4.) As sources of radiation, radioisotopes have been useful in insecticide research for autoradiography and as a source of gamma rays for catalyzing the chlorination of benzene (2). As tracer atoms, radioisotopes have been used in insecticide research in many ways including (a) distribution and mode of action studies (Figure 5), (b) isotope dilution analyses (Figure 6), (c) chromatography (especially paper chromatography) studies, and (d) neutron activation of paper chromatograms. Again, a discussion of the techniques involved is beyond the scope of this paper but attention will be called to the use of these methods in the following section dealing with the preparation and use of labeled insecticides.

Preparation and Use of Labeled Insecticides

NUMBER of synthetic organic chemicals with unusually effective insecticidal properties have been discovered, mostly by commercial companies, in recent years as a result of intensive empirical testing programs. Because of this method of development, the practical value of a good insecticide is determined usually by the entomologist before much re-

Fig. 6. A diagrammatic illustration of the use of radioisotopes for isotope dilution analyses. (Courtesy of the Isotopes Division, USAEC).

FOR ISOTOPE DILUTION ANALYSIS



ADVANTAGES:

- I-SENSITIVITY MANY TIMES GREATER THAN CHEMICAL ANALYSIS
- 2- QUANTITATIVE CHEMICAL SEPARATION PROCEDURES NOT NECESSARY

LIMITATIONS:

- I-SPECIFIC ACTIVITY SHOULD CHANGE BY A FACTOR OF 2 OR MORE
- 2-a. ISOTOPE MIXTURE ADDED b. SAMPLE ISOLATED FOR ANALYSIS MUST BE CHEMICALLY PURE

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FROM

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carbon remover compounds
paper coatings
water paints
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pharmaceuticals
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That's not all—in addition to Morpholine, Carbide and Carbon offers several Morpholine derivatives—N-Methyl, N-Aminopropyl, and N-Phenyl Morpholines in commercial quantities and N-Ethyl, N-Acetyl, and N-Hydroxyethyl Morpholines in research quantities.



Aspden Expands

SPDEN ASSOCIATES, INC., Greensboro, N. C., sanitary supply jobbing firm, recently took possession of its newly constructed and expanded offices and warehouse adjoining the original building, which was constructed in 1946. With the additional unit, the firm has tripled the space it occupies. The new building, of fireproof construction, has been designed to permit more efficient

handling of incoming and outgoing merchandise. Loading platforms are provided on two levels and parking space at the rear is adequate for 12 cars. The offices include one for general purposes, two private offices for executives, and a large and efficient mail room. The entrance foyer opens directly into the general office area. Pictured on this page are a set of photographs just received by Soap and Sanitary

Chemicals of the new Aspden office and warehouse facilities.

Reading clockwise, the photographs show: the entrance foyer (lower left); Milton Hono-Aspden, president and founder of the III-year-old firm; the exterior of the building, with the new wing at left; warehouse as seen from the assembly area on the first floor, and general office with mail room in background. Shown, I. to r. in general office are: Mrs. Nicholson, bookkeeper and accountant; Mrs. M. H. Aspden, secretary; B. J. Kincard, shipping and receiving; Grady W. Scott, vice-president, and Dennis R. Snead, treasurer.

Formulation of Aerosol

PHE aerosol industry is fast growing out of the small specialty class and becoming a significant factor in the consumer market. Many of the products packaged in this way have become established items in households or industrial use because of the effectiveness, economy, or convenience associated with the aerosol method. The growth of the industry as a whole has been rapid since the first aerosol insecticide was developed a few years ago. It has expanded not only in size but also in the variety of different products packaged in self-pressurized containers and dispensed as sprays or foams.

The distinguishing characteristic of the aerosol or self-propelled method of packaging is the use of a liquefied gas as the propellent. The pressure for dispensing the product is maintained at a constant uniform level by the vaporization of the liquefied propellent as the material is sprayed from the container. This assures a uniform rate of discharge and range of particle size throughout the period of use and also permits the ejection of the entire contents of the container.

Not included in this definition are packages pressurized with a non-liquefied gas such as the familiar whipped cream or products propelled by compressed air.

Although this discussion is primarily concerned with some of the technical problems involved in the formulation of aerosol products, a brief survey of the extent of the present market may be interesting.

Size of Market

A N indication of the present size and diversity of the aerosol industry is found in the report of a products survey recently conducted by the aerosol division of the Chemical Specialties Manufacturers' Association. According to the report, almost 97,-000,000 units were produced in 1952 -representing an increase over 1951 of about 133 percent. It seems clear that the novelty stage has been passed and that such an increase in volume must be based on satisfied acceptance by the consuming public.

In Figure 1, the total production has been broken down to illustrate the share of the market claimed by the individual classes of products.

About one-third of the total went to space insecticides-reflecting in small part some buying by the armed forces for field use. The first aerosol insecticide was developed for the Army during World War II and it is now standard equipment for all branches of the military organization. The second most popular item was pressurized shaving lather and there is some indication that in the near future it may climb to a higher level on the scale.

The miscellaneous products listed in third place include Christmas novelties, dog sprays, mildew preventives, medicinals, lubricants, ignition sprays, anti-static sprays and other unclassified materials. The class labeled personal products covers such things as shampoos, perfumes, personal deodorants, sun tan oil, hair lacquer, and athlete's foot preparations. Under the household group are waxes, insect repellents, water repellents, rug shampoos, etc.

As the industry grows, the number of firms engaged in the packaging of aerosol products has also increased until now more than forty aerosol packers are in business. This

Figure 1. Distribution of the 1952 aerosol production according to type of product.

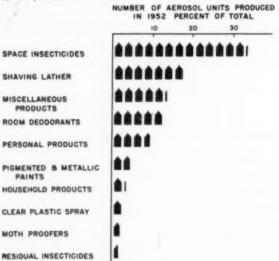
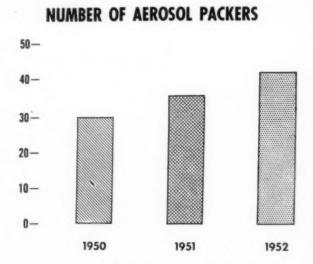


Figure 2. Increase in the number of aerosol packers during the past three years.



Products

By R. C. Downing and E. G. Young

number is compared with previous years in Figure 2.

Dealer Survey

DDITIONAL information about the aerosol market has been obtained in a survey" conducted by the Du Pont Company among retail dealers in 60 cities in this country. Retail dealers in six different types of stores were questioned about the extent of stocking and sale of aerosol products as well as consumer opinion on this method of packaging. The per cent of dealers interviewed who handled at least one aerosol product is shown in Figure 3. Drug stores head the list with 97% stocking at least one type of aerosol, followed by hardware stores with 88% and grocery stores with 76%. Service stations might seem to be an unlikely outlet for these products but they have built up a good position in insecticides and surface coatings and the survey shows that 46% stock at least one kind of aerosol.

The order of listing in Figure 3 is based on stocking at least one type of aerosol product but the order is quite different for a particular class of product. For example, according to the survey, pressurized paints or lacquers were stocked by 44% of the hardware stores and by 18% of the department stores. On the other hand, self-propelled shaving lather was sold by 85% of the drug stores surveyed, by 27% of the department stores, by 15% of the variety stores, and by 11% of the grocery stores. Surveys of this type are valuable in charting the direction for most efficient sales effort.

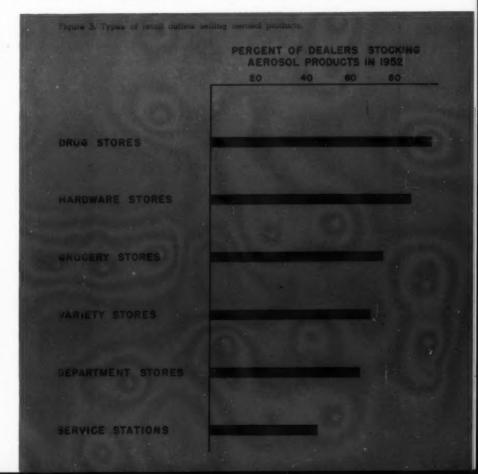
THE aerosol industry as a whole is resting solidly on the base of consumer acceptance and a bright future is forecast for self-propelled products. In the face of this growing popularity,

more than usual consideration should be given to the formulation of the product so that only the best is offered

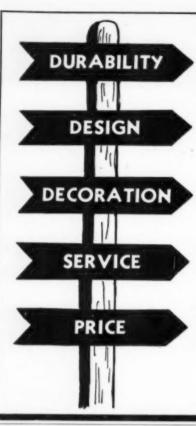
to the public. It must be effective in doing the job for which it is designed. This end result is accomplished by a combination of factors including the nature of the active ingredients, the construction of the valve and container and the formulation with the propellent. All of these things are interrelated and dependent on each other so that there are in general a number of different variables and they must all be properly adjusted to give an effective and desirable product.

For example, an aerosol insecticide must meet certain standards of effectiveness in order to gain the approval of the Department of Agriculture. Of course, adequate amounts of active ingredients are needed both for long-time effectiveness and for fast knockdown. But formulations containing relatively large amounts of insecticide may not pass the test unless the particle size distribution is right. This property can be adjusted by valve design, proportion of propellent in the formula, and the pressure in the container.

The valve and container must withstand any possible corrosive or solvent action by the materials inside for a sufficient period of time to include distribution and normal use. If a corrosive condition is found, it may be corrected by a change in the formula or in the design and construction of the valve or container. The valve must operate at all times and deliver the kind of spray or stream best suited for the particular application. From the standpoint of sales appeal, variations in the external appearance of aerosol packages are somewhat limited and yet this important phase of marketing cannot be ignored. The design and arrangement of labels or lithographed surfaces must be considered. Most of the commonly used containers are made of steel and may be tinned or lined with a polymeric coating. Some



^{*} Copies of the survey may be obtained by writing to the "Kinetic" Chemicals Division of E. I. du Pont de Nemours & Co., Wimington, Del.



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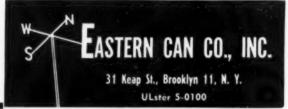
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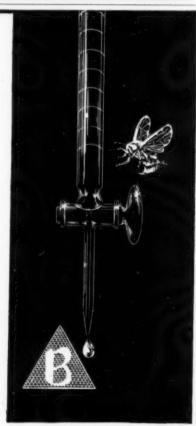
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SOAP and SANITARY CHEMICALS

specialty products are packaged in aluminum or glass and the use of these materials may be greatly extended as means of handling them are developed.

Propellent Formulation

BEFORE an aerosol product is marketed the formulation must be thoroughly tested in the laboratory. Each different type of product has problems of its own and should be considered individually in the testing program. However, in many cases the problems are similar in nature even though they may be solved by different methods.

In general, the testing of a new formulation will involve questions of compatibility, pressure, spray character, flammability, and corrosion or stability. Here again, many of these factors are related and when changes are made in the formulation to satisfy one property, some of the others may be affected. The final formulation will represent a balance in all of these characteristics so that the optimum result can be obtained. A few comments on these properties follow.

a. Compatibility

The term compatibility is used in aerosol work not only to include questions of original solubility but also whether there may be changes in the physical condition of the formula on storage or as a result of changes in temperature. In some cases, complete solution of all of the materials of the formula may be needed. In others, only partial solubility may give a satisfactory product-while in others, such as the water-base foams, the aqueous layer and liquefied propellent layer are separate. The compatibility may change quite rapidly with temperature so it is well to make the test at the lowest temperature likely to be encountered in use. With most solvents the solubility is less at lower temperatures.

Uniform, clear solutions are found in aerosol insecticides, room deodorants, sun tan oils, clear plastic sprays and similar products. Because the active ingredient—such as the insecticides or perfume—may not be sufficiently soluble in the propellent by itself, an auxiliary solvent generally is added. This solvent may be a hydrocarbon oil or an alcohol or any other

inert solvent suited to the needs of the formulation. In addition to its solubilizing effect it may also have some influence on the character of the spray and the particle size. The relative concentrations of active ingredients and solvents generally permit great latitude in the amount of propellent that may be used so that suitable formulations may be readily devised. This is not the case, however, for some solutions containing resins, as in the clear plastic sprays. Here the resin may form a significant part of the solution and the addition of too much propellent will cause gellation or precipitation of the resin. For example, gellation occurs when more than 1.8 parts of "Freon-12" dichlorodifluoromethane propellent is added to a xylene solution containing 40 per cent by weight of a typical alkyd enamel resin. In this case, a suitable formulation can be worked out using a propellent composed of "Freon-12" mixed with "Freon-11" trichloromonofluoromethane. The latter compound does not have sufficient pressure for use by itself but is a better solvent for the resin solution.

Some examples of limited compatibility in aerosol formulations would include hair lacquers, paints, and wax products. In all of these types the base solvents and the liquefied propellent are miscible and form a single uniform liquid phase. The solid parts of the formula are carried as a fine suspension which may or may not settle out on standing and need to be redispersed by shaking before use. The pigment in enamels and lacquers does settle and each can usually contains two or three metal balls to help break up the pigment cake if the can is stored undisturbed for a long time.

As mentioned above, care must be used in formulation to prevent the precipitation of the resin from the solvent-propellent solution. With hair lacquers the limit of compatibility is the point at which the shellac begins to coagulate and settle from the dispersion. With a commonly used hair lacquer formula, this point is reached when 40% of "Freon-12" dichlorodifluoromethane, or about 65% of a "Freon-12" dichlorodifluoromethane-

"Freon-11" trichloromonofluoromethane solution, has been added.

A special problem has been introduced by wax aerosol products. The particle size of the original wax dispersion is controlled to give good spraying and coating qualities. However, ICC regulations require that each loaded aerosol container be heated to 130° F. for five minutes, and during this heating some of the wax dissolves. When the can is cooled again to room temperature, the dissolved wax is precipitated in relatively large globules. This change in form may in some cases reduce the effectiveness of the product. The use of higher melting wax and a solvent system in which the wax has less solubility may tend to reduce the seriousness of this effect.

Shampoos, shaving lathers, and hand lotions illustrate systems in which there is little or no compatibility between the propellent and the waterbased concentrate. During use, the propellent is emulsified with the aqueous phase but on long standing it may separate as a clear liquid layer on the bottom. The amount of solubility of one phase in the other depends on the formulation of the aqueous layer. If, in addition to the active ingredient, modifying oils or alcohols are present, some mutual solubility may occur. The pressure in the can will be essentially that of the separate propellent layer but will be lowered to the extent that some of the materials from the formulation are dissolved in the propellent. The stability of the emulsion may be improved to some degree if there is a certain amount of solubility, although emulsion stability is not generally a critical factor in this type of product. The solubility of the propellent in the formulation is usually slight. It was found to be about 0.8% by weight, for example, in the case of a typical shaving lather concentrate and a propellent composed of "Freon-12" dichlorodifluoromethane and "Freon-114" dichlorotetrafluorome-

b. Pressure

The development of an aerosol formulation also requires careful consideration of the pressure that will be present inside the container. The pressure is important for several reasons,



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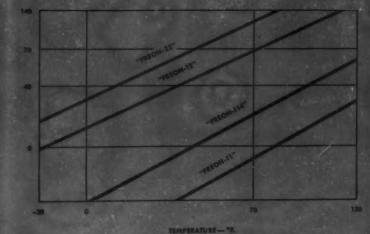
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PRESSURE-TEMPERATURE RELATIONSHIPS OF "FREON" PROPELLENTS



igure 4. Change in vapor pressure of "Freon" fluorinated hydrocarbon propollents with

including the question of hazard in storage and use, because it controls to some extent the quality of the product and because it is regulated by the ICC for interstate shipment.

The ICC regulations are published in Tariff No. 8 by the Bureau of Explosives, 30 Vesey Street, New York 7, N. Y.

For nonflammable materials pressures up to 40 psig are permitted in the ordinary low pressure aerosol containers and up to 60 psig in the "2P" specification seamless containers with heavier bottoms. If formulations with still higher pressures are desired, the container would require separate

ICC approval. Special regulations cover flammable materials and foam products.

The pressure can be controlled in several ways including choice of propellent, concentration of propellent, type of solvent and method of loading. The nature of the formulation and the compatibility problems involved determine to a large extent which variations can be used. Individual propellents may vary in pressure from less than atmospheric for "Freon-11" to 122.5 psig at 70° F. for "Freon-22" monochlorodifluoromethane as shown in Figure 4. In addition, any intermediate pressure can

be obtained by using solutions of two or more of the "Freon" compounds. The range of pressures produced by two such solutions—using "Freon-12" with "Freon-114" and "Freon-12" with "Freon-11"—is illustrated in Figure 5. Other pressure ranges are covered by various combinations of the other common propellents.

The pressure is affected by the nonvolatile solvent, if any, used in the formulation, as shown in Figure 6. Solutions containing the "Freon" fluorinated hydrocarbon propellents in many cases are "normal" and the vapor pressures are close to those estimated from the simple gas laws. This type of solution is illustrated by butyl acetate and most hydrocarbon and halogenated solvents. On the other hand, solvents that are quite different in chemical nature, such as the fluorinated hydrocarbons and the alcohols, tend to produce solutions with pressures higher than might be expected. The presence of water in the solution has a relatively large effect on the pressure, as shown by a comparison of the curves for anhydrous and 95% ethyl alcohol.

From Figure 6, it can be seen that the pressure can be almost doubled by the choice of the nonvolatile part of the solution. In a few cases, azeotropic mixtures may be formed where a particular composition may have a vapor pressure higher or lower than any of the individual components.

5. Change in vapor pressure of "Freon" fluorinated hydrocarbon propellent solutilh temperature.

VAPOR PRESSURE OF PROPELLENT SOLUTIONS

Temperature: 70°F.

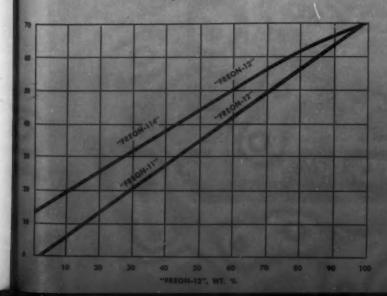
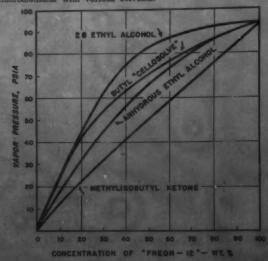


Figure 6. The vapor pressure of solutions of "Freen-12" dichloro-





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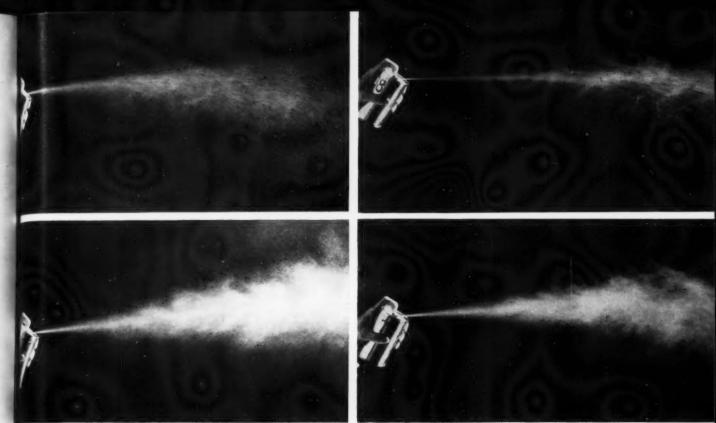


Figure 7. Difference in α typical hair lacquer spray caused by change in propellent concentration. In upper photo total pressure: is 39 psig, 25% propellent; lower photo, total pressure: 40 psig, 60% propellent.

Figure 8. Difference in a typical hair lacquer spray caused by change in the total pressure. In upper photo total pressure: 13 psig, 50% propellent. Lower photo, total pressure: 36 psig, 50% propellent.

Aerosol products are commercially charged into the container by one of two methods. The propellent may be cooled below its boiling point and poured liquid phase into the open can or it may be charged into the closed can through the valve under pressure. In either case, the nonvolatile portion of the formulation is usually first put in the can.

Unless it is first evacuated, the vapor pressure of the formulation tends to be higher when the can is loaded by the pressure method than when loaded by the refrigeration method. This difference is related to the air in the can which has no chance to escape during pressure loading. As an illustration of the possible difference, a pressure of 40 psig was found when a formulation was cold-loaded in the laboratory as compared with a pressure of 51 psig when the same formulation was pressure-loaded. To comply with ICC regulations, if this product were pressure-loaded, the manufacturer would need to use the heavier "2P" classification can.

c. Spray Character

An important property of the finished aerosol product is the character of the spray when it is dispensed from the can. The nature of the spray can be controlled by varying the concentration of the propellent and/or the pressure of the formulation. For the examples shown in Figure 7, where the total pressure was about 40 psig, a propellent concentration of 25% produced a wet spray with relatively large droplets that tended to settle rapidly. When the propellent concentration was 60% a fine, misty spray was formed. In Figure 8, formulations containing 50% propellent are illustrated.

A high pressure produces a misty spray while a low pressure produces a much wetter, stream-like spray. Although not illustrated here, the valve design is also important in determining the character of the spray.

The character of the discharge in foam-type products may also be changed by differences in the formulation. Variations in foam structure for different propellent concentrations are shown in Figure 9. The propellent in these examples was a solution com-

posed of 40% by weight of "Freon-12" dichlorodifluoromethane and 60% of "Freon-114" dichlorotetrafluoroethane. The shampoo A formula in percentage by weight consisted of 35% "Duponol" WA paste fatty alcohol sulfate, 3% polyethylene glycol 400 distearate, 1% magnesium stearate and 61% water. Stiff, dry, elastic foams are produced at higher propellent concentrations, whereas soft, somewhat wet, and less resilient foams are produced at lower propellent concentrations.

Different propellents tend to produce different types of foam as illustrated in Figure 10. These differences may, in part, be related to the vapor pressure of the propellents used in the formulation. Even though the propellents are present in the same concentration, those with higher pressures tend to give a stiffer and more elastic foam than those with lower pressure. The propellents illustrated in Figure 10 have the following vapor pressures at 25° C. (77° F.):

"Freon-12"	dichlorodifluoromethane	80	psig
'Freon-12"	dichlorodifluoromethane-"Freon-11" trichloromonofluoromethane	41	psig
"Freon-12"	dichlorodifluoromethane-"Freon-114" dichlorotetrafluoroethane	44	psig
'Freon-22"	monochlorodifluoromethane-"Freon-114" dichlorotetrafluoroethane	49	psig

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SOAP and SANITARY CHEMICALS

New Osmotas Germicides

Two new appliances that produce what is claimed to be a powerful, odorless germicide from tap water have recently been introduced by The Niche, Orange, N. J. Called "Osmotas", the appliances are available in two types: the sanitary jar unit, for home and public use and the general service unit for industrial purposes.

The sanitary unit is installed by placing it in the toilet flush tank where it is claimed to eliminate odors and purify the water for a period of 12 months. The general service unit is primarily made for bulk users of disinfectant and is said to produce a minimum of 1,200 gallons of odor-less, concentrated, non-poisonous, non-corrosive disinfectant from tap or sea water. The solution can be diluted as much as ½ pint to a gallon of water and is said to clean effectively.

Vestal

(From Page 135)

on pallets through the same type of pre-set, automatic shut-off meters which are used for charging, then moved directly onto the shipping floor.

Dual handling of finished products is avoided by consolidating the shipping collection area and the finished products storage area. Careful planning of production schedules and of space utilization provides an average one week's supply of packaged product to be maintained in a compact area where stock pickers can select stock for direct removal to carrier's truck or freight car after truck or car has been placed at the loading dock.

Modernization and mechanization of plant has paid off for Vestal. Output has been increased by 125% during a period in which the work force has grown by only 60%. While the average wage of the Vestal plant worker has increased 120% in the last decade, unit cost of manufacturing has increased by only 25%.

Every effort is made to provide a pleasant working environment for its employees. The high standard of sanitation advocated for its customers is practiced by the company in its own plant and offices. Despite the handling of large quantities of waxes, resins, vegetable oils and other chemicals which intensify the maintenance problem, the plant is kept clean and attractively painted. Management is convinced that good housekeeping is essential to the safety, health and good morale of its employees as well as to the efficiency of its operation. Safety in the plant is stressed constantly and Vestal has the fortunate record of no serious injuries during its manufacturing history.

The Vestal plant accommodates shuffleboard and horseshoe courts, ping pong tables and air conditioned recreation rooms for plant and office personnel for relaxation periods which are intentionally unscheduled.

Sales Policy

LTHOUGH a manufacturing company from the very outset, Vestal views its business not as one of the making and selling of chemical products, but rather as consisting essentially of promoting and selling superior sanitary maintenance. Conscious of the fact that expenditure for its products constitutes only a small portion of the average maintenance dollar, Vestal management stresses that effective methods are as important as effective materials. Consequently, labor-saving techniques and methods providing greater performance are constantly pursued through coordination of technical staff, field supervisors and the salesmen. Training of sales representatives is emphasized with the objective that each man shall be capable of analyzing any maintenance problem, particularly with floors, and then of prescribing correct procedures as well as the proper materials. Salesmen are encouraged to report freuently on new techniques and new products (or the need for them) encountered in their work. New methods or products are thoroughly screened through a field testing program before being released to the sales organization.

However, sales service factors are not emphasized to the exclusion or neglect of products, as evidenced by the fact that the technical staff numbers in personnel more than one-third of the entire production group.

Modern, air-conditioned facilities in the process of expansion includes four laboratories. Two bacteriologists staffing one of the laboratories are concerned with the bacteriological aspects of sanitation—equally important in the modern concept as physical cleanliness. Also included are facilities for chemical specialties research, organic chemical research, a controlled temperature and humidity laboratory for physical testing and an analytical laboratory. Construction under way will add three additional laboratories and an enlarged technical library.

Management considers continuous research on all major products and on new products essential for continued progress and, more important, for survival in a highly competitive field.

As one executive expressed it, "Data from large maintenance operations has reconfirmed many times the fact that maximum product performance is essential to lowest overall cost. This means we must strive to provide the highest quality possible in our products. Such products are far from the cheapest to buy, but we're convinced they are the cheapest to use."

The Vestal trademark, a Vestal Virgin, symbol of purity in Roman mythology, carries the notation "Quality Tells, Specify Vestal." Vestal's policy is directed toward living up to it.

P&G Orchid Festival

Procter & Gamble Co., Cincinnati, continued promotion of their new "American Family Detergent" in the Chicago area with an "Orchid Festival" designed to interest housewives in the P. & G. American Family Premium Store at 57 W. Wacker Drive in Chicago. Visitors were presented with a Royal Hawaiian orchid, together with 50 free coupons and a premium catalog. Later, during July, coupons were distributed by mail throughout Chicago, which offered free, a large box of the new detergent, the first claimed to be made specifically for the Chicago hard water area, to each purchaser of one box at the regular price.



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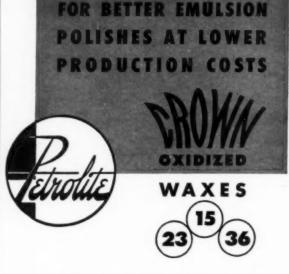
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These three Petrolite waxes have proved themselves especially suitable for use in the manufacture of emulsion polishes. Crown 23 and 36 have been widely used for a number of years, and are now component parts of many famous brand-name polishes. Crown 15 is a new product of the Petrolite wax refinery, especially developed for polish formulations utilizing resins. All three waxes have similar physical characteristics such as light coloration, hardness and saponifiability.

Crown 15 is characterized by its high terpene phenolic resin compatibility, and can be used in conjunction with high melting point resins in 50/50 proportions, or higher, without the use of any carnauba wax. Emulsions made with Crown 15 are translucent and dry to a hard, glossy, non-tacky film.

SPECIFICATIONS

Petrolita Wax	MP°F	Pen.	Color NPA	Acid No.	Sap. No.
15	180 min.	4-6	4-5	14-16	50-60
23	180 min.	4-6	4-5	20-25	55-65
36	180 min.	5-7	5-6	30-35	75-85

If you have an emulsion polish formulation problem, one of these Petrolite waxes may be the answer. Samples, prices and technical information are yours for the asking. Shipments can be made F.O.B. Jersey City, Chicago, Kilgore and Los Angeles.

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WAX DIVISION

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SOAP and SANITARY CHEMICALS

PRESSURE PACKED SHAMPOO

EFFECT OF PROPELLENT CONCENTRATION ON PHYSICAL APPEARANCE OF FOAM



5%





10%

N-12" AND "FREON-114" (40/60) PROPELLENT WITH SHAMPOO A e 9. Effect of propellent concentration on typical aerosol shampoo foam.

PRESSURE PACKED SHAMPOO

EFFECT OF DIFFERENT PROPELLENT ON PHYSICAL APPEARANCE OF FOAM









"FREON-22"



Figure 11. Measurement of the per cent overrun in aerosol shampoo formulations.

"FREON-II4" (40/60)

"FREON-12"

"FREON-II" "FREON-12" (50/50)

"FREON-114" (14/86)

PROPELLENT CONC. = 10% SHAMPOO A

Figure 10. Type of foam produced by different propellents at the same concentration.

Aerosol . . .

(From Page 149)

Another factor that should be considered in foam-type self-pressurized products is the per cent of overrun. This term is used to indicate the volume of foam that is produced when the product is used and may be defined in the following way:

% overrun = volume of foam — volume of liquid \times 100

volume of liquid

Apparently, the amount of overrun depends primarily on the concentration of the propellent and the nature of the aqueous formulation. In one case, using 10% of a propellent composed of "Freon-12" dichlorodifluoromethane and "Freon-114" dichlorotetrafluoroethane with a shampoo formula, the overrun was 1170%. When the propellent concentration was increased to 20% the overrun was about doubled but as indicated above, the foam was rather stiff and dry. Laboratory measurement of the per cent overrun is illustrated in Figure 11.

d. Flammability

The "Freon" fluorinated hydrocarbon propellents themselves are entirely nonflammable and will not burn or support combustion. In fact, they have fire extinguishing characteristics and 'Freon-12" dichlorodifluoromethane has been found more effective than carbon tetrachloride on both a weight and a volume basis. However, when used in formulations containing relatively large amounts of flammable materials the final solution might be flammable and this possible hazard should not be overlooked.

None of the established meth-

ods for testing the flammability of liquid materials seemed entirely adequate when applied to aerosol products. As a result, the Chemical Specialties Manufacturers' Association has developed a combination of three tests to describe the fire hazard of sprayed liquids*. These methods have been thoroughly examined and have been recommended by the Bureau of Explosives of the Association of American Railroads for ICC approval. The tests are somewhat different in nature and are intended to represent conditions that might develop during the use of the product.

1. Self - Pressurized Dispenser Flame Projection Test. (See Figure 12). The aerosol product is sprayed into an open flame from a distance of 6 inches.

If the flame extends over 8" it should be classed as combustible. If the flame extends over 18" it

should be classed as flammable. If the flame flashes back to the container it should be classed as flammable.

^{*}For a complete discussion of these methods see the Proceedings of the 38th Mid-Year Meet-ing of the Chemical Specialties Manufacturers' Association, June 1952, Page 50.

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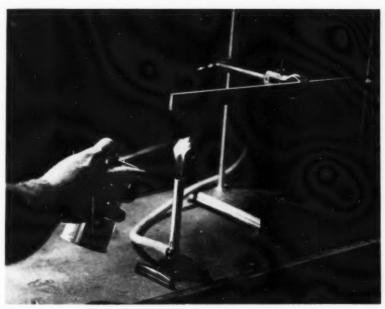


Figure 12. Simplified equipment used in the flame projection flammability test.

Modified Tagliabue Open Cup Test.
 The propellent is released from the aerosol container in the vapor phase.
 The remaining liquid is transferred to a regular Tagliabue open cup and the flammability measured in the usual way.

Materials which have not developed a flash after a drop of ½" in liquid level from the initial starting line are recorded as having no flash under the conditions of the test.

Materials which flash below 100° F. would be considered flammable.

Materials which flash below 300° F. would be considered combustible.

3. Drum Test.

The aerosol product is sprayed into a 55-gallon steel drum fitted with a hinged end, shuttered openings for admitting the spray and sight glasses for observing the result. A small flame is placed in the center.

The product is classed as flammable if there is any significant propagation of flame away from the ignition source when the end is open or, when hinged end is down, if there is explosion or rapid burning sufficient to cause the end to move. A pressure of five pounds will cause the end to open.

The lowest rating received in any of the three tests is used to designate the flammability class of the product.

In general, all products such as insecticides or room deodorants containing more than 80% of "Freon" fluorinated hydrocarbon propellent have no flammability hazard. When the propellent concentration is reduced, flammability may become a factor. For example, a representative hair lacquer formulation was tested in the flame projection test using a propellent containing 50% by weight each of "Freon-12" dichlorodifluoromethane and "Freon-11" trichloromonofluoromethane. When the lacquer was packaged with 50% propellent there was considerable extension of the flame and the product, on the basis of this test only, would probably be classed as flammable. With 65% propellent, the projection was much less and the classification would probably be on the borderline between nonflammable and combustible. When the propellent concentration was increased to 75%, the flame was projected only 3 inches-well within the nonflammable range.

In common with other properties of aerosol products, the flammability characteristics cannot be arbitrarily changed without consideration of the over-all effect on the formulation. If changes are made to improve the flammability, compensating adjustments may be necessary in the other properties. Increasing the propellent concen-

tration will reduce the flammability but at the same time the pressure will be increased and the concentration of the active ingredient will be decreased. It may be necesary to take steps to alter these properties to bring the formulation again within the desired specifications.

In addition to ICC regulation, various states and cities may have restrictions governing the sale and distribution of products that have questionable flammability. If aerosol formulations of this type are introduced all pertinent regulations should be investigated.

e. Corrosion

The problem of corrosion is important in every industry using metal containers or metal closures or valves because of the possibility of leakage or contamination of the product. In addition to these general effects, the aerosol industry is especially concerned about corrosion because of the possible safety hazard associated with materials packaged under pressure. The record of the aerosol industry from the standpoint of accidents and safety has been exceptionally good and every effort should be made to keep it that way.

It is difficult to establish general rules for predicting the corrosive effect of aerosol formulas because of the great variety of materials being used or considered for use. Each new formulation must be thoroughly shelftested for stability in the laboratory before it is offered for public sale. The test should include storage in the container and for a sufficient length of time to demonstrate clearly the noncorrosive nature of the material. The container should be filled and handled as nearly like the commercial operation as possible. Enough units should be placed in storage to permit frequent inspection of representative cans and to allow for a long storage period if the formulation should prove to be stable. Emphasis should be placed on storage at ordinary room temperatures, although higher temperatures may also be used. Accelerated tests at higher temperatures, however. can be misleading and caution should be used in interpreting the results. Higher temperatures may develop reaction or cor-

(Turn to Page 177)

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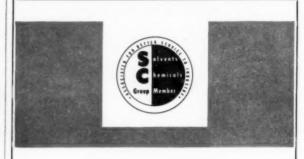


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Eechnical BRIEFS

New Floor Wax in Flake Form

NEW type floor wax in flake form is the subject of German patent 832649 (1952). Each flake consists of a soft nucleus of the basic mixture incorporating a solvent. A thin hard wax coating is almost free of solvent. This form of floor wax is said to be more economical in use than the conventional paste waxes and powdered dance floor waxes. Ease of application-the hard flake coating is broken when the product is rubbed on the floor-and even distribution by sprinkling are other advantages claimed for the flake wax.

These flake waxes are produced as follows: A roller, cooled by water or electricity, revolves slowly on the surface of the molten mixture of waxes, solvents and thinners, in such manner that it carries continuously on its surface a thin layer of the melt. This coating solidifies almost immediately on the cooled surface of the drum and hardens further after a few more revolutions. It is then peeled off by a peeling knife which is coupled to the roller, and by this operation is broken up into small flakes. While the light flakes slowly fall to the ground, exposure to the air removes from their surface more of the solvents and thinners present in the melt thus further hardening their outer layer. This method produces flakes which do not cake in spite of high oil content.

In practice the cooled roller does not revolve right on the surface of the melt but in a flat trough connected with the kettle by a valve. This arrangement facilitates the regulation of temperature and permits maintenance of a continuous flow of mixture onto the roller regardless of the level prevailing inside the kettle.

Two formulations suitable for processing by the above method are suggested: 1) Hard wax (crude montan, carnauba, shellac, etc.) 18 parts, praffin (or ozokerite, ceresin, etc.) 17 parts, solvent (turpentine, mineral spirits, etc.) 65 parts. 2) Hard wax (as above) 16 parts, paraffin (see above) 14 parts, and solvents (see above) 70 parts.

EPN in Mosquito Control

Ethyl-para-nitrophenyl thionobenzenephosphonate (EPN) has proved the most effective of three phosphorus compounds tested against DDT resistant mosquito larvae by U.S.D.A. entomologists, according to a recent report of E. I. du Pont de Nemours & Co., Wilmington, Del. Approximately one ounce per acre of active EPN applied by plane or ground sprayer was found to give almost complete kills of the larvae. Effectiveness at such low dosage is an important safety factor. Under some conditions even lower concentrations are said to give good control.

EPN was first synthesized in a du Pont laboratory in 1947 and placed on the market in 1950. Limited field tests carried out in the Kern District of California in June 1952 led to the use of EPN, under an experimental permit issued by the state, for mosquito control in Kern rural areas. The use of EPN for mosquito control in other areas may be permitted in the future, provided it is applied by experienced personnel observing all precautions necessary in the handling of any organophosphorus compound.

Bactericidal Power and pH

pH and the adaptation of bacteria against quaternary ammonium disinfectants is the subject of a paper by Roland Fischer, General Hospital, Munroe-Wing, Regina, Canada, published in the May issue of the Manufacturing Chemist. Dr. Fischer describes experiments which show that the bactericidal power of cationic quaternary disinfectants is influenced by pH. Manufacturers of cationics should accordingly market their quaternaries in such form that the pH of

the germicide is slightly alkaline or neutral rather than slightly acidic in the proper germicidal dilution because bactericidal power is higher under such conditions. A slightly alkaline or even neutral medium also counteracts the possible development of bacterial strains adapted to the particular quaternary in question.

New Anti-Germ Paper

A process whereby paper is successfully impregnated with a germicide has recently been announced by Permachem Corp., New York. The product is claimed to kill or inhibit a wide range of bacteria, and is also said by the maker to be effective against certain molds and fungi.

New Phenol Process

new oxidation-cleavage A process for more economical production of phenols, developed in this country by Hercules Powder Co., Wilmington, Del., is being used under license from Hercules and from The Distillers Co., Ltd., of England, in a new plant opened May 27 at Montreal East, Quebec. The new plant is owned and operated by B.A.-Shawinigan Ltd., and is expected to turn out approximately 13,000,000 pounds of phenol and about 8,000,000 pounds of acetone in addition to by-products, such as acetophene, alphamethylstyrene, and mesityl oxide, when ultimate production rates are reached.

Hercules is building its eight million dollar Higgins plant at Gibbstown, N. J., to utilize the same process, and at least six other such plants are said to be under construction in the U. S. and abroad. The oxidationcleavage process is currently being used by Hercules at Hattiesburg, Miss., and Brunswick, Ga.

Quats in Sugar Making

Use of quaternary ammonium compounds as antiseptics in sugar manufacture, especially in regard to Leuconostoc mesenteroides, is the subject of a paper by R. Buttiaux and P. Devillers, Institut Pasteur, Lille, France. Congr. intern. ind. agr., 8th Congr., Brussels, 1950, 199-212, through Chem. Abstracts, vol. 47, No. 7, p. 3590g.



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Rosin Acids %	8-10	18-20	26-28	50-60	35-40	38-42	
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News

Garland d-Con Pres.

Jerome S. Garland has become president of the d-Con Co., Chicago manufacturers of warfarin rodenticides, in a move by directors which made his predecessor, Leonard Lee Ratner, chairman of the board. A program was approved calling for expansion of the sales organization, stepped up research and a broadening of the product line.

Join Hollingshead Unit

Appointments of Joseph A. Caskey and Howard S. Dahleen as account representatives for the private brands division of R. M. Hollingshead Corp., Camden, N. J., were announced recently. Mr. Caskey joined the firm last year as a district salesman for the company's automotive department. Later he was transferred to the general offices and served as a job and methods analyst until his recent appointment. Before joining the company, Mr. Dahleen was employed as manager of automotive sales for the Franklin Transformer Manufacturing Co., Minneapolis.

Names Mrs. Wickham

Designation of Leona Wickham as advertising and customer relations manager for Bobrick Manufacturing Corp., Los Angeles, was announced recently by William S. Louchheim, president. Mrs. Wickham, who joined Bobrick recently, was formerly with Barton A. Stebbens advertising agency and prior to that, managed the Palmer Institute of Authorship in Los Angeles. In assuming her new position, she is effecting a closer liaison between the Bobrick organization and its distributors throughout the nation. She also handles all matters pertaining to dealer advertising needs.

Prentiss on Nuodex Bd.

Election of Richard J. Prentiss and A. E. Horn to the board of directors was announced recently by Nuodex Products Co., Elizabeth, N. J. Mr. Prentiss is the former president of Prentiss Drug and Chemical Co., New York and Chicago. Mr. Horn was a



RICHARD J. PRENTISS

former president of A. C. Horn and vice-president of Sun Chemical Corp.

USDA Ups Lindquist

Appointment of Dr. Arthur W. Lindquist, U. S. Department of Agriculture entomologist, as head of the division of insects affecting man and animals was announced recently by the Bureau of Entomology and Plant Quarantine, Washington, D. C. Dr. Lindquist fills the position held by Dr. Edward F. Knipling, who was recently named assistant chief of the bureau.

Haas R & H Vice-Pres.

Election of John C. Haas as a vice-president and member of its executive committee was announced recently by Rohm & Haas Co., Philadelphia. He has been a director of the company since Sept. 14, 1948. A 1940 graduate of Amherst College he received an M.S. decree from Massachusetts Institute of Technology in 1942. Mr. Haas joined Rohm & Haas as a development engineer, and in 1946 he was transferred to the production department. In May 1949 he was made assistant plant manager of the Knoxville, Tenn. plant. Since October, 1950 Mr. Haas has

served in a similar capacity at the firm's Houston plant. His headquarters are in the firm's main office in Philadelphia.

J.N.T. Signs F.T.C. Order

J.N.T. Manufacturing Co., New York recently signed a stipulation with the Federal Trade Commission agreeing to discontinue representing directly or by implication that its product, "Silv-R-Cote," wil renew silverware. Also the company must stop advertising that the product reinforces silverplate or plates Sheffield, or that it deposits silver on silver, and that it coats other than the worn areas of silverware and Sheffield where the base metal is exposed. It must not claim that repeated application of the product will provide a coating any thicker than the original application. It must discontinue from making comparisons between the cost of coating articles with the product and the cost of having them silver-plated, in such manner as to represent, directly or by implication that the coating which may be applied by the product is comparable to that put on by commercial plating.

Limits Insecticide Claims

Claims that "MCP Insecticide 'B'" and "MCP Water Base Spray" do not taint nor contaminate foods must be accompanied with a statement limiting such claims to use of the insecticide according to specific directions which are contained on the label, according to a recent FTC stipulation signed by Mill Creek Co., New York. Also, the company must stop representing that "MCP Insecticide Water Base Spray" is effective for 21 days, or any other period of time not in accord with the facts.

New Paste Auto Wax

A new paste type automobile wax that cleans and waxes in one operation has recently been introduced by Aura Chemical Co., Chicago. The product is packaged in a handy container measuring 4½ inches in diameter by 1½ inches high. Eight ounces, said to be sufficient for three waxings of any sedan, come in each can. The product retails for \$1.95.

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Gillespie Joins Devenco

John T. Gillespie, Jr. has been named sales manager of its newly organized "Swingfire" division, Deven-



JOHN T. GILLESPIE

co Inc., New York, announced recently. The division is marketing, among other products, a pulse-jet portable insecticide applicator known as "Swingfog."

Since his appointment, Mr. Gillespie has been engaged in establishing dealerships throughout the United States, Canada, Mexico, Central America and the Philippines, all of which comprise the area in which Devenco has been licensed to market the "Swingfire" line. Before going with Devenco, Mr. Gillespie was employed by Watson Sillman Co., Roselle, N. J., which he joined in 1944 as manager of export sales and later became general sales manager. During World War II, as a dollar-a-year man on loan from Air Reduction Co., he was in the division of contract distribution, U. S. Maritime division of War Production Board. From 1932 to 1941, Mr. Gillespie was employed in various sales executive capacities with Air Reduction and its subsidiaries Wilson Welder & Metals Co.

Dual Geigy Anniversary W. F. Zipse, president of Geigy Co., New York, and the organization he heads, recently celebrated their fiftieth anniversaries jointly. Mr. Zipse joined the company when it was established in New York in 1903. He first entered the employment of John J. Keller & Co., New York, a Geigy

representative from 1870, and joined Geigy Aniline and Extract Co., one month later when the parent Swiss firm purchased the Keller organiza-



W. F. ZIPSE

tion, July 1, 1903. He began his association as a dye pot and bottle washer in the dye laboratories, and soon after was transferred to the sales staff of the company. After 10 years he was appointed sales manager, and five years later was made vice-president and director. He was named president of the company in 1943.

His development in the Geigy organization parallels the acquisition of an important interest in the Cincinnati Chemical Works (Norwood and St. Bernard, O.) in 1920; the purchase of Alrose Chemical Co., Cranston, R. I., and the construction of a modern insecticide plant in McIntosh, Ala. for the synthesis of DDT, benzene hexachloride (BHC) and other active ingredients employed in the insecticide field. Its insecticide business, starting from the acquisition of the DDT patents, finds plant operations in 10 important sections of the U.S.A.

The film also announced that 1958 will be the occasion of the 200th anniversary of the founding of Geigy in Switzerland.

Radioactive ...

(From Page 139)

search has begun on the mode of action of the compound. Thereafter various industrial, governmental, and private laboratories attempt to determine how these chemicals act. Despite these many efforts, one of the least understood problems associated with the development of these new insecticides is their behavior after they have entered the body of an animal or a plant. A recognition of the value of using tracer-labeled insecticides for this type of research has led to the synthesis of many insecticides labeled with radioisotopes.

(To be continued)

A five-year licensing agreement to cover royalties on the use of two-and three-phase glass aerosol developments was concluded recently by Continental Filling Corp., Danville, III., with Zonite Products Corp., New York, controllers of the patents pending, Harry Peterson, center, president of Continental, signs the licensing agreement with Rudolph J. Hahn, left. secretary-treasurer, and Harris M. McLaughlin, Zonite's president, in the New York offices of Zonite. Continental will supply glass aerosols for its customers' products.



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POWDERED SOAP DISPENSERS DURABLE, EFFICIENT and INEXPENSIVE

No. 11 TRANSPARENT PLASTIC DISPENSER with

push-up type valve.
Applications: Specially designed for service station, garage, home use. Applications: Specially designed for service station, garage, home use.

Features: Durable, transparent plastic container. Inexpensive... low in maintenance cost. Class-fitting top swings open for convenient filling. Positive metal apilator prevents packing—meets most soap flow characteristics. Push-up plunger permits quick, one-hand operation. Steel sleeve surrounding dispensing mechanism gives added strength... prevides secure support for steel bracket for well mounting.

Materials: Exterior metal parts have baked-enomet finish to harmonize with plastic color.

Specifications: Size—8" high x 4" diameter. Weight—6 ez. Capacity

approximately 1 pint (liquid measure).

Pucking: Stondard packing-1 unit to individual re-shipper carton

No. 10 ALL-PLASTIC DISPENSER with posh-in type valve.
Applications: Industrial plants, public buildings, office buildings, schools, theaters, gasoline stations—also a practical convenience for the

Factures: Transparent plastic container, Wide-opening top for easy filling (Lack-top-Model 18-L-optional). Positive agitator prevents packing, insures smooth, even flow. Non-clag thrust-in discharge valve easy to clean. Heavy brockets for direct mounting to well or pipe. Specifications: Size—8" high x 3½" x 3½". Weight—14 oz.

Capacity—1 quart (liquid measure).
Packings Standard packing—1 unit to individual re-shipper carton (weight—1 lb. 5 az.); repacked 1 dazen to shipping coso. CHROME SOAP DISPENSERS (Palished) Nos. 3 & 4 — PUSH-IN and PUSH-UP Types

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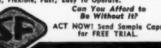


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AMA Blasts Vaporizer Use, Claims

warning against what it calls the "improper and excessive use" of insecticide vaporizer and fumigator devices has recently been issued by the American Medical Association, Chicago. It also questions the wisdom and ethics of promotional practices in view of the "culminating evidence of the dangers of insecticide vaporizers and fumigators" in such localities as homes, hospitals, nurseries. The warning came in an editorial appearing in the July issue of the Journal of the American Medical Association, supplemented by a report undertaken by the group's committee on pesticides.

In spite of recommendations against the use of insecticide vaporizers in homes, sleeping quarters or where food can become contaminated, this type of insecticide volatilizing equipment continues to be advertised and promoted as safe and harmless, the editorial states. According to the committee's report, dispensing insecticides into the atmosphere of buildings and other enclosed spaces principally for the control of flying insects is being exploited in a number of ways. In the main, the committee's report provided laboratory and clinical evidence of the risks attendant on improper use of these devices and the highly toxic material, usually, lindane, which they dispense, AMA said.

"Opinion varies greatly as to the safety of vaporizing devices in human environment," the report stated. "Evidence in the majority of cases of injury suggests that defective equipment or other types of nonconformance with recommendations for use were primarily responsible; nevertheless, it is impossible to state that ill effects have not or will not result from properly operating devices used precisely in accordance with instructions. Extensive use of these devices has demonstrated that human beings can acquire a sensitivity to lindane."

The report pointed out that reactions to lindane, such as irritation of the eyes, skin and respiratory tract, have been brought to the attention of the medical profession. In addition,

some cases of such serious conditions as anemia, asthma-like afflictions, tracheitis, and near-fatal total suppression of urine secretion by the kidneys have been suspected of being caused by exposure to lindane from these devices. Some states and municipalities have passed laws controlling the use of vaporizers. As a result of such legislation some manufacturers of such equipment are exploiting them as fumigating devices, the committee report said. Potential harmfulness through misuse of these fumigating devices far outweighs any recognized usefulness in homes, it added.

"Although existing restrictions have had a beneficial influence it is generally recognized that they have only partially deterred many of the abuses associated with insecticides dispersing appliances," the report concluded. "Widespread misuse arising from improper installation and continued employment of unacceptable chemicals and equipment is still prevalent. The flamboyant and misleading advertising of certain of the more aggressive firms marketing these dispensers is mainly responsible for their continued, widespread misapplication. The continued extravagant promotion of certain types of insecticide vaporizers under the guise of fumigating equipment is also of great interest to those responsible for protection of the public welfare.

"Insecticide fumigating devices are being advertised as portable, ornamental, deodorizing (chlorophyll), disinfecting (triethylene glycol), and useful for everything but healing. The absurdity of this advertising is not so much a subject of medical concern as are the claims, direct or implied, of harmlessness for uses that are in direct violation of current safety practices for volatilized chemicals."

Food Group Elects Snyder

Walter F. Snyder, executivedirector of the National Sanitation Foundation, was elected executive director of the National Conference on Food Protection at a meeting held recently at NSF headquarters at Ann Arbor, Michigan.

Mosquito Control Article

How mosquito control is made more effective by modern insecticide formulations, is the subject of an article in the Rohm & Haas Reporter for July-August. Spraying with a formulation of five percent DDT and three percent "Lethane"-"Lethane 384" and "Lethane 384 special"-is recommended for a quick knockdown and killing control. Also recommended are "Rhothane," a chlorinated insecticide related to DDT, but more effective against certain species of mosquitoes, gnats, and black flies, and "Triton" emulsifiers, used in the formulation of insecticides to impart emulsifying, spreading, or wetting activity in preparations intended for application as larvicides. The use of fogging machines for treating more populous areas is also covered. Types of fogging machines used and results obtained using this method of applying insecticides are also mentioned.

Lloyd S. Burns Dies

Lloyd S. Burns, 54, vice-president of E. Reed Burns Manufacturing Co., Brooklyn, makers of polishing materials, died recently at Columbia-Presbyterian Medical Center, New York. He was born in Brooklyn and was graduated from Brooklyn Polytechnic Preparitory Country Day School and Princeton University. He leaves his wife, Mrs. Dorothy Fullerton Burns; two sons, Lloyd S. Jr. and Hugh R. Burns, and a daughter, Carolina.

New Fly Trap

A new fly trap featuring a disposable plastic fly bag has recently been introduced by Bandwagon Mfg., Inc. of Boston, to sell in the one dollar price range. Called "Little Giant Flytrap," the device is boxed complete with two disposable polyethelene bags that clamp to a metal trap head. Also included are two packets of "Lur-Kill Compound," a new substance containing fly lure as well as an insecticide agent.

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LONG ISLAND CITY I, NEW YORK WAREHOUSE: DALLAS, TEXAS

Majestic Contest Winners

The awarding of prize money to 15 salesmen of sanitary supply jobbers was announced recently by Majestic Wax Co., Denver. Herman Strauss, president of Majestic, said that the winning case histories would be used in an advertising campaign for "Velva-Sheen" floor treatment, this fall. The following salesmen won prizes in the contest: First prize, Shim D. Lehrman, A. J. Lehrman & Sons, Harrisburg, Pa.; second prize, V. M. Jacobsen, Black Hills Chemical Co., Rapid City, So. Dakota; third prize, Harry Hubman, Hubman Supply Co., Columbus, O.

Honorable mention prizes went to: W. H. Richmond, Hockwald Chemical Co., Los Angeles; Jack Richter, I. Janvey & Sons, Hempstead, N. Y.; Lew Waldron, Columbia Chemical Co., Chicago; Malcolm Levi. Mayer Myers Paper Co., Memphis; John A. Bach, Sanitary Supply Co., Colorado Springs, Colo.; Herb Behrens, Lien Chemical Co., Franklin Park, Ill.; Saul Schulley, Formula Floor Products, Inc., Bridgeport, Conn.; Donald K. Enoch, Wichita Brush & Chemical Co., Wichita. Kans.; Harry E. Blough, Lien Chemical Co., Rockford, Ill.; Frank Tarrant. Arrow Products Co., Birmingham, Ala.; J. A. Jowitt, Hubman Supply Co., Columbus, O.; and Clarence Overturf, Bockstanz Brothers Co., Detroit.

New Auto Wax Sales Strong

Retail sales of the one-operation car wash and wax combination, "Purple Magic," are expected to reach a quarter of a million dollars this year, according to a recent disclosure by Herbert H. Charles, president of Choldun Manufacturing Co., New Haven, Conn. The product, which contains vegetable coloring, vegetable compounds, wax and cleaning agent, and does not contain soap, acid or synthetic detergent, had been selling at the rate of about \$1,000 a month when first introduced less than a year ago, Mr. Charles pointed out. The steadily increasing demand on the part of mail order houses, hardware stores, appliance chains, however, has necessitated the supplementing of extra shipments throughout the nation, Mr. Charles added.

In addition, Mr. Charles announced the appointment of Edward Jennings as assistant sales manager. Mr. Jennings was formerly with the North American Battery Co.

Approve Coumachlor Name

"Coumachlor" is the coined name selected for the rodenticide 3 (alpha - acetonyl-4-chlorobenzyl)-4-hydroxycoumarin and approved by the Interdepartmental Committee on Pest Control, it has recently been announced. Rodenticides containing this compound had previously been referred to as "Tomorin" and as "Geigy Rodenticide Exp. 332."

Approval of the name "coumachlor" by the committee implies that the name is available for free use in designating the pure chemical 3-(alpha - acetonyl - 4 - chlorobenzyl) -4-hydroxycoumarin. The name "coumachlor" applies to the pure chemical. A purified product which contains a minimum of 98 percent of the pure compound, is used in the formulation of bait concentrates.

Photos reproduced below were taken during the recent annual outing of F. W. Hoffman & Co., Philadelphia. They show, left to right and top to bottom: Frank Hoffman, Martin Peters, Moore Brothers Co., New York, and Jay Zucker, State Chemical Míg. Co., Cleveland; Charles Solly, Harley

Pyrenone Supplies Steady

Manufacturers of pyrethrumtype insecticides can be fully assured of ample raw material supplies for the 1954 season, John A. Rodda, manager of insecticide sales, U. S. Industrial Chemicals Co., New York, announced recently. Further expansion of sales programs can be undertaken safely with no fear of running into difficulties through shortages of raw materials or unexpected price increases, he added. Expanding production in the Belgium Congo and elsewhere has resulted in high pyrethrum supplies for the next 12 months at least.

Martin to Handle Permagel

Assignment of C. O. Martin to sales and technical service activities in connection with "Permagel" thickening agent for organic and aqueous media, was announced recently by Attapulgus Minerals & Chemicals Corp., Philadelphia. He has been closely associated for the last five years with laboratory development and application research work on "Permagel." Mr. Martin holds a B.S. from the University of Pennsylvania, from which ne was graduated in 1948.

Soap Co., Philadelphia, Leo J. Kelly, executive vice-president, National Sanitary Supply Assn., and Mr. Hoffman. Messrs. Solly, Hoffman and Kelly, and standing rear, the Firestone quartet from Pottstown, Pa., aided by John Coyle of F. W. Hoffman Co.



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This isn't an Ad-it's an **APOLOGY** Mister Jobber!



What a crying shame! We just found out that some of you fellows didn't get to hear about our new NOXON deal - the big FREE introductory kit, the FREE case of 213 1-ounce bottles with your first order for 6 cases of 1-gallon cans, the low, LOW delivered prices.

Hundreds of Jobbers grabbed this deal and are cashing in, but BIG. But somehow our mailing list had gaps in it. If we missed YOU, neighbor, it's costing us both real money and we're awful sorry about it. Excuse, please!

Maybe you'd like to know anyway how to put money in the bank with the finest all-purpose Metal Polish on the market, the one that's fattening the pocketbooks of so many wideawake Jobbers? Just tear out this ad, clip it on your letterhead and holler "Show me!"

The All-Purpose **Metal Polish**

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Check these outstanding features . .

Has been approved by Fire Prevention Division of K. C., Mo. Fire Department.
Will flameproof all absorptive fabrics.
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Will not stiffen fabrics and will not affect color of most dyestuffs.
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WRITE TODAY FOR FULL DETAILS!

OTHER PER-MO PRODUCTS . . Mothproof Liquid (5 year guaranteed) Warfarin for Rats and Mice Rat and Mice Liquid Red Squill Rat Paste Red Squill Rat Bits Antu Rat Paste "Chek" Deodorant

Midland's 50th Anniversary

A celebration to mark the 50th anniversary of the founding of Midland Laboratories, Dubuque, Ia., was held recently by the families of the firm's executives and representatives at Maxwelton Braes, Baileys Harbor, Wis. Midland Laboratories, founded in 1903 by the late L. O. Hillyard, manufactures maintenance and sanitation products: floor seals, finishes, waxes, liquid scrub soaps, liquid hand soaps, disinfectants and insecticides, for private and public institutions and industries. Since its origin, the company has grown to the point where it now has representatives throughout the 48 states, Canada, Puerto Rico, Cuba and the Hawaiian Islands.

Isonicotinic Acid Reduced

A reduction of \$3.00 per pound in the price of isonicotinic acid was announced recently by Reilly Tar & Chemical Corp., Indianapolis. The new price is \$5.00 per pound, drum lots, f.o.b. Indianapolis. The price reduction, company officials said, was made possible by increased production of necessary raw materials at Reilly's new synthetic heterochemicals plant in Indianapolis. The company first offered isonicotinic acid on a commercial scale two years ago.

Dow Ups Hunter

Dr. Ralph M. Hunter has been named staff coordinator of all electrochemical activities for Dow Chemical Co., Midland, Mich., Dr. Mark E. Putnam, executive vice-president of the firm, announced recently. In his new capacity Dr. Hunter coordinates electrochemical operations on a company-wide basis and facilitates the exchange of research and development information.

At the same time, Dow announced that Howard E. Houser, associated with the company since 1927, and assistant to Dr. Hunter in the Midland division, has been named division head of chlorine, graphite and ammonia operations. Dr. Hunter retains charge of the Midland Electrochemical Laboratory which continues under the immediate direction of Dr.

Robert D. Blue who joined the company in 1934 and has served as laboratory head since 1949. Dr. Hunter was for several years president and a director of Midland Ammonia Co., until its facilities were purchased by Dow in 1952.

New Floor Finish

A blend of plasticized resins in water emulsion said to impart a non-slip finish to floors was introduced recently by Arnold Laboratories, Glendale, Calif. "Formula 99 Saf-T-Gloss" leaves a hard durable finish which reduces floor stripping operations to once a year, according to the manufacturer, thus reducing cost of labor and materials. It may be used on all kinds of floors, and is non-flammable and fast drying. The product is available in one gallon and five gallon cans and in 15, 30 and 55 gallon drums

Lavery & Sanders Expands

A large research laboratory has been added to the plant of Lavery & Sanders at its newly acquired property at 1410 North Front St., Philadelphia, it was announced recently. At the same time, the company announced that Edward H. Barnett has been appointed director of research for the new laboratory. He was formerly connected with George Sann Co. and International Resistance Co.

New Deodorant Doll

A new deodorant that is 'housed' in a plaster of paris doll has recently been introduced by Lambert Research Laboratories, Wellsville, Mo. Production is said to be about 1,000 dolls daily. The company is owned by W. H. Lambert, son of the former head of Listerine Co., St. Louis.

Putman Fine Distributor

Appointment of Putman Co., 3124 Lexington Rd., Montgomery, Ala., as its exclusive selling agent for its aviation-industrial line, in the states of Alabama and Georgia, and its industrial line in North Florida, was announced recently by Fine Organics, Inc., New York.

Expand "Freon" Plants

Expansion of its facilities for manufacturing "Freon" brand fluorinated hydrocarbon compounds for the aerosol industry, among others, at the Chambers works plant at Deepwater, N. J., and East Chicago, Ind., were announced recently by E. I. du Pont de Nemours & Co., Wilmington, Del. The two million dollar expansion program calls for the erection of a fourstory building and service facilities to go into operation at the organic chemicals department at Deepwater, N. J., where the major portion of the new manufacturing facilities are located. The new unit, featuring open steel construction with enclosed control rooms, is designed for continuous automatic production of fluorinated hydro-

Construction on another continuous manufacturing unit has begun at East Chicago to supply additional "Freon" to aerosol packagers in the west coast and central states areas. This unit is expected to be completed within three or four months.

Names Shoreline as Agent

Appointment of Shoreline Metals Co., Los Angeles, as its exclusive distributor for the West Coast, was announced recently by M. W. Greenberg, general sales manager of United Metal Box Co., Brooklyn. Adequate stocks of all United Metal Box Co. products are maintained by Shoreline, according to Mr. Greenberg.

Tells of "Santophen I"

An article which describes the germicide, "Santophen I," appeared in a recent issue of Monsanto Magazine, published by Monsanto Chemical Co., St. Louis. "Santophen I," a benzoated phenolic germicide with phenol coefficients of 150 to 200, has been approved by the government for use in disinfectant-cleaner preparations, according to the article. Prior to "Santophen I," a government regulation provided that cleaning and disinfecting be two distinct operations. "Santophen I" is claimed to have excellent compatibility with high ratios of soap.



Lindane has proved effective in eliminating or controlling every insect pest. Now Universal's Uni-Vap provides maximum effectiveness from Lindane with an entirely new construction fea-ture. It's exclusive with Uni-Vap, and it assures complete vaporization at a constant rate, regardless of outside conditions. PLUS features include Chromalox heating element, Westinghouse Uni-Therm thermostat, and guaranteed long service with low maintenance. Dealers' inquiries invited.







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with Electro-Pneumatic controls and push button finger-tip operation. Foot pedals and hand levers are entirely eliminated. Even unskilled operators can attain maximum speeds. Also Can Filling Machines, Tube Filling and Closing Machines and Bottle Cleaning Machines



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CERAMIC RESTORER AND SANITIZER

EMAC is a revolutionary new formula that restores ceramic tile floors to their original appearance.

> EMAC removes stains and residues from any porcelain surface.

EMAC is not harmful to the user or the surface.

EMAC is a concentrated economical powder. one pound makes one gallon.

FMAC is a real door opener for Johbers and Distributors; it works where others fail.

EMAC is available in 25-50-100 lb. drums,

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MOUNTAIN VIEW, NEW JERSEY

*Pats. Pending

Storks Should Label Babies

The author of the piece we publish below has asked to remain anonymous. All we can say about him is that he is burdened by one of the larger chemical specialties manufacturing firms with the job of seeing that all of their labeling complies with the multitude of laws on the subject. He also attempts to make labels more readable and more understandable.—Ed.

To the United Storks of America, Postal Ozone No. 7, Skytop, U. S. A. Gentlemen:

Accidents happen to children... they frequently make the local newspapers . . . according to figures I worked out from national newspaper clippings for 1951, 85 per cent of the children's accidents involved babies under five.

"There ought to be a law" . . . that was my first thought. Then I found there were bushels of laws, federal, state, municipal with plenty of regulations, interpretations and clarifications for good measure.

"The manufacturer ought to warn his customers of dangers." I thought I had the answer there until I began to examine labeling. The things I found on bottles and cans were a caution, and I mean that . . . inflammable, poison, do not take internally, keep away from eyes and mouth, avoid inhalation and skin contact, dangerous fumes, take only as directed, dilute before using, keep away from foodstuffs, shake well, keep from freezing, do not use near children nor pets, avoid exposure to smoke and fumes, keep away from fire.

Do you think those little babies paid any attention? Either they didn't bother reading the cautions or were just plain stubborn.

Then I thought of using a different type of container for dangerous products . . odd shape, distinctive color, rough outside surface. Nope, the perfume people beat me to that one.

So, in spite of laws and cautions babies will get into trouble and we will have to work through parents, but it must be pretty plain to anybody that we can't reach parents through labeling packages because parents don't read directions either.

Now I'm going to put the whole problem on the doorstep of you United Storks of America. It's your fault anyway because you haven't kept step with the times; you've continued to drop these helpless tikes in the homes of intelligent people and morons indiscriminately . . . no word of directions for use of your product, no acceptance of responsibility . . . it's a wonder that you are still in business, even if you are a monopoly.

You've got to label babies,

that's all there is to it. You must use a label of distinct and contrasting color from the skin. You'll have to change the label colors when you change the skin colors. Be sure to put the name at top of label. This will eliminate prize fighters being named Montmorency or Chauncey.

Showing "net weight" will stop family arguments. "Use immediately for tax deduction" will freeze out any scheming uncles. Under the name or names, print the word CONCENTRATED for twins and triplets. Quadruplets and quintuplets may use "Family Size" with the caution "May be habit forming." Do not print any kind of guarantee on label. At the bottom (of label) put "Distributed Only by the United Storks of America, Unlimited"

Where doctors say "Hold the baby's head," you should say, "Hold the baby's hands." Instruct grandmothers to keep their pills under lock and key, not on chairs beside the bed. Advise grandfathers that a spoonful of gasoline put in a milk or pop bottle is not worth saving.

Remind fond fathers that rat poison which is good for rats because it kills them is not good for babies for the same reason, and is not to be put around on crackers or in dishes and paper cups. Tell them that spot removers are swell on neckties and lighter fluids are excellent in lighters, but set up horrible actions in infantile gastrointestinal tracts.

Point out a few things for moms too, simple things like the fact that low tables, shelves and closets are awful close to baby's exploring hands. Babies really live a hand to mouth existance between the ages of one and three where two-thirds of the accidents happened in my figures.

Tell moms that even good foods might be bad stuff for little tads. Soaps, detergents, cleaners, disinfectants, deodorants . . . all excellent in their fields . . . tell mothers to keep them there. Remind mothers that nature can be pretty toxic herself . . . the addition of 2 per cent of ordinary table salt to the normal diet of experimental animals result in decreased growth and increased kidney size . . . red pepper and the acetic acid in vinegar are harmful in sufficient quantities . . . caffeine in coffee. theobromine in cocoa, the 3.4-dihydroxyphenylalanine in certain beans . . . some spinaches, rich in oxalates, can cause gastric disturbances if even generous helpings are eaten in one day.

Of course you mustn't scare mothers...or maybe you should, but not during the first year nor after the fifth, at least not too badly. According to my figures, only 4 per cent of the accidents happened during that first year while the baby was still new, constantly being shown off to relatives

and neighbors, checked every few hours for this and that, mostly that.

Yes sir, I am convinced that the only way to prevent accidents to little children is through parents and adults . . . and only a label on the baby will do the job. Furthermore, the label must be waterproof, must not fade nor come off for five years and must appear on that portion which is normally presented to the public and all cautions must be in type of a size which will be readable under normal conditions of purchase and use.

Will you please take up this subject at the next national meeting of the United Storks of America and advise me of the action taken.

Very truly yours, THE KIDDIE'S FRIEND

Malathon for Roaches

Precautions to be observed in the use of malathon for the control of chlordane-resistant cockroaches were listed recently in a technical bulletin of the National Pest Control Assn. The bulletin is available to N.P.C.A. members only. Malathon, made by American Cyanamid Co., New York, is an organic phosphate insecticide of relatively low mammalian toxicity. As the result of its investigation, the N.P.C.A. bulletin reported that it saw no justification for the use of malathon in roach control where chlorinated hydrocarbon residual insecticides may still be used effectively. However, the available toxicological information indicates that malathon may be used on a restricted basis indoors without undue hazard to the health of the occupants of the building or the operators making the application. Conditions and precautions for any experimental applications of malathon indoors were given in the N.P.C.A. bulletin.

At the present time, American Cyanamid Co. is not recommending the use of malathon in homes. It suggests that tests of malathon in warehouses and in outdoor locations in cockroach control are justified if such applications can be made without any possibility of food contamination. However, the firm has suggested that suppliers of formulated malathon be encouraged to request an experimental permit under the Federal Insecticide Act to obtain official recognition of this application. Malathon has not been registered for cockroach control under the Federal Insecticide Act.

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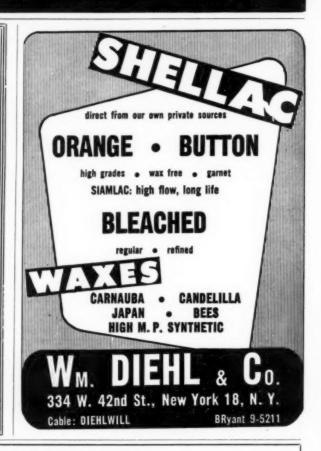
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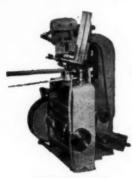
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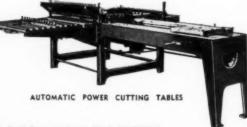
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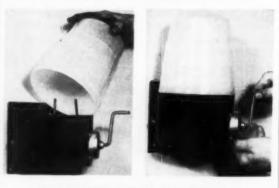
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Production Chemist: Assistant plant manager, cleaning compounds, sanitary chemicals, foods, oil products, similar. Production and personnel supervision; laboratory control, management, safety. Age 38, married, veteran. American Institute of Chemists, American Oil Chemists Society. Salary \$5800. Address Box 814, c/o Soap.

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Soapmaker & Chemist: Competent. Having long experience in making of all kinds of soaps and cleaning compounds. Experienced chemist and glycerine recovery. Can take full charge of production. Address Box 817, c/o Soap.

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Wanted: Required in good condition second hand household soap barring machines and semi-automatic stamper, also Soap & Glycerine Manufacture by Webb, Soap Manufacture by Hurst and textbooks by Deite. Air mail full details to Apartado 1202, Lima, Peru, S. A.

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Wanted: Complete soap or sanitary chemical plants. Also individual items such as crutchers, plodders, mills, mixers, presses, dryers, filling equipment, etc. R. Gelb & Sons, Inc., State Highway No. 29, Union, N. J.

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For Sale: Houchin 6" plodder 5 II.P. motor; Houchin 9" x 24" W. C. 3-roll inclined steel mill; Empire State & Houchin foot presses; Filter presses C.I. & Wd. plate and frame 7" to 30"; Horizontal spiral mixers 100 to 2000#, some jacketed; Rotex 40" x 120" single deck and Roball 40" x 120" triple deck screens; Dopp 250 gal. kettle;

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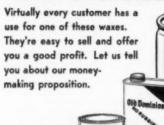
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eted kettles 100, 350, 600 gallon; Blackmer pumps; tanks; carton gluer-sealers. Ask us to quote on your requirements. Tell us what idle machines or plants you have for sale. Consolidated Products Co., Inc., 15-21 Park Row, New York 38, N. Y. Phone BArclay 7-0600. Inspect our stock at our warehouse, 331-341 Doremus Ave., Newark, N. J.

Hauser Heads S&D Assoc.

Election of Philip L. Hauser, Lowell Manufacturing Co., Chicago, as its new president was announced by the National Sprayer and Duster Association, following the association's 8th annual meeting held recently. He succeeds R. B. Chapin, R. E. Chapin Mfg. Works, Inc., Batavia, N. Y., who has served for two years. T. M. Burton, D. B. Smith and Co., Utica, N. Y., was elected vice-president, and D. P. Lewis, H. D. Hudson Mfg. Co., Chicago, was reelected treasurer. W. Floyd Keepers was named secretary, with new offices at 330 S. Wells St., Chicago. Other members elected to the executive board are: R. B. Chapin, C. D. Leiter, F. E. Myers & Bro., Co., Ashland, O.; R. W. Merritt, Root Mfg. Co., Malta, O.; and R. M. Yoder, Dobbins Mfg. Co., Elkhart, Ind.

Heads L&F Research

Designation of Dr. J. B. Nagler as head of the research, development and quality control laboratories of Lehn & Fink Products Corp., New York, was announced recently by Edward Plaut, president. As head of the research and development program, Dr. Nagler is responsible for the creation of new products. He entered the industrial chemical field in 1934 when he joined Joseph Bauer & Co., Vienna, as control chemist. In 1937 Dr. Nagler became associated with Arlinco Research Laboratories in New York, and later went with Charles of the Ritz and Warner-Hudnut, Inc., New York. Most recently he was technical director of the drugs and cosmetic division of the International Latex Corp., Dover, Del. He received his Ph.D. degree from the University of Vienna.

Penick Assigns La Forge

Byron La Forge has been appointed as a general representative for all Penick lines in the metropolitan New York area, S. B. Penick & Co., New York, announced recently. Mr. La Forge, formerly special representative for the company's essential oils and water soluble gums departments, in his new post covers 43rd Street, Manhattan, and the entire area from 43rd Street up to and including Yonkers, N. Y. In addition, the firm has announced that Arthur Kirby is covering Brooklyn and Long Island and that Fred Rauch and Marius Thode continue to service certain special accounts.

Public Health Convention

News of latest developments aimed at preventing disease and promoting personal and public health will be exchanged by professional workers from all parts of the free world at the 81st annual meeting of the American Public Health Association and annual sessions of 40 related organizations at the Hotels Statler and New Yorker, New York, Nov. 9-13, according to a recent announcement by Dr. Reginald M. Atwater, the Association's executive secretary. Theme of the meetings will be "Meeting the Health Needs of the Community."

Weed Killer Controls Rats

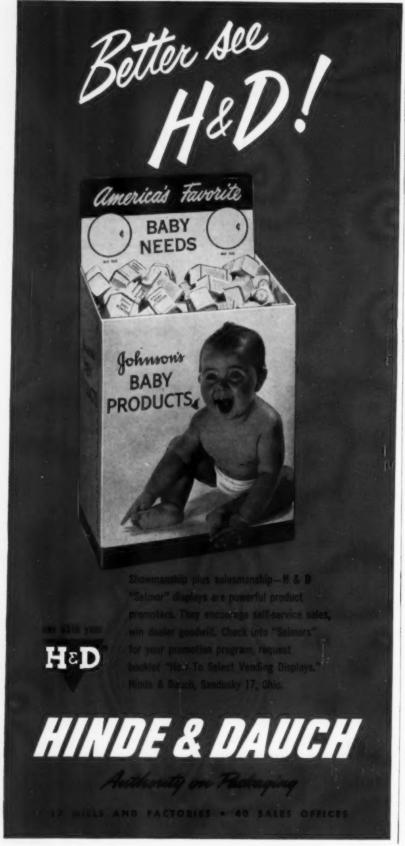
The use of a chemical weed killer called "CMU" is an effective step toward eliminating rats, E. I. du Pont de Nemours & Co., Wilmington, Del., announced recently. "CMU" weed killer applied now will kill vegetation near burrow entrances.

Aerosols...

(From Page 155)

rosion that is not evident or practically significant under ordinary storage conditions. The Aerosol Division of the Chemical . Specialties Manufacturers Association is developing recommended methods for conducting storage tests on aerosol products so that suitable and uniform methods will be available to the industry.

Corrosion problems vary con-



siderably depending on the type of product. Non-aqueous formulas in general are not corrosive although care should be used to prevent the admission of excessive amounts of water. For example, a moisture content below 80 ppm has been specified for aerosol insecticides packed for the Armed Forces. There is some evidence that the presence of a separate water layer is much more corrosive than water dissolved in the formulation. When free water is present it will float on top of the liquid formula and the corrosion, if any, may develop at the liquidvapor interface or in the vapor space generally, including the valve.

Corrosion is more of a problem in the packaging of aerosol personal products than in other types because many of these formulations contain water or alcohol. It may seem like a contradiction to exclude water from some formulations and at the same time expect others with a water-base to be satisfactory. The fact that some types containing water are not corrosive-for example, shaving lather and hand lotion-is probably due to protective ingredients such as soaps and oils in the formula. On the other hand, difficulties with shampoos containing synthetic detergents or some antiperspirant formulations containing aluminum salts may be traced to the corrosive nature of the active ingredient. It is especially important in working with synthetic detergent formulations to use an adequate storage test. Individual laboratory tests may not indicate an unreasonable amount of corrosion but in commercial practice an uneconomically high percentage of units may develop a pinhole type of corrosion. In the laboratory, a large enough sample must be used to show up this effect if it will be a factor.

The battle against corrosion is being waged on many fronts and the problems are gradually finding solution. In addition to aluminum and steel, containers of glass now seem practical. New and more resistant can linings are being studied as well as the possibility of using chemical inhibitors. As new formulations are developed, new problems will undoubtedly arise but the possibility of finding a satisfactory answer is getting better all the

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Eale Ends

COUPONS! Coupons! Coupons! And not to forget gimmicks! Labor Day has "come and went," as they say in Greenpoint, and the 1953 fall coupon blizzard is upon us. The soap sellers are off on their semi-annual give-away crusade in their battle for the market. One starts it and the others unquestionably will follow suit. Who has the courage to sit calmly at his desk and watch his competitors give away their factories piece by piece, and not be panicked by the same idea?

With more than usual interest we note that the A & P has dropped the price of its detergent, "Sail," from 23c to two for 39c in their stores. Isn't this the item which was going to make them independent of the "big" brands, the item on which they could make a nice wide margin of profit? Maybe our memory is faulty, but we seem to recollect that "Sail" was in effect a protest brand against the skimpy profits on retail soap and detergent sales. Looks like something may happen to the "protest" profit with about \$2 knocked off the case trice.

The soap industry of India is in the midst of a five-year development program, we have just found out from the South India Soap Makers' Assn. The object of the program is to raise the consumption of native manufactured soap in India during the 1951-56 period. The present per capita soap consumption of soap in India is 10 ounces. The plan is to boost this figure to 15 ounces. The firm determination of the South India soapers to reach their goal is obvious. But to do it, they need practical help,-something like the widespread cleanliness campaign waged by the American Soap Assn. which has done so much to boost and sustain soap and detergent use in the U.S.A.

Both the Geigy Company, New York and its quiet, soft-spoken, bowling-on-the-green prez, William F. Zipse, last month celebrated their 50th anniversaries together. In fact, Bill Zipse beat the Geigy company to the job by one month. He had been with the old dyestuffs firm, John J. Keller & Co. for one month when Geigy bought them out. For years, Geigy was a well-known dyestuffs house,-and still is -but when their Swiss company came up with the discovery of DDT during the war, this spectacular development threw them into the national spotlight. The Zipse rise in Geigy was the real American Horatio Alger article,-from office boy to president. Congratulations are in order!

For a short time recently, we had visions of a tremendous increase in the market for chlordane, lindane, and other roach killers in and around N. Y. Based on a news story, we visioned the city about to be overrun by these big Madeira cockroaches which are two inches long or better. They

make our home-grown German roaches or "water bugs" mere midgets by comparison. It seems that scientists of the National Pest Control Assn., including Dr. Ralph Heal, and its secy., Bill Buettner came on several bad infestations in the N. Y. Puerto Rican quarter, evidently brought in by travelers from that island. The story hit the newspapers with a bang. Then next day, some low pup from the USDA said there was no danger of the city being overrun. Poof went the story and the roach powder market!

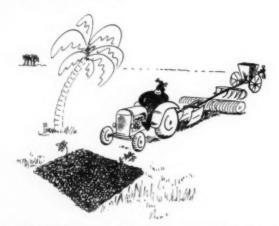
Ken Voorhees, prez of Ungerer & Co., New York, accompanied by Ivon Budd, vice-prez of the same, are touring Europe. They sailed on the S. S. Liberte last month and by now are somewhere in the perfuming materials centers of France, Spain or Italy. But both gentlemen confided in us before leaving that they planned to "do" other parts of Europe as well before returning, including England, Holland, Belgium and Sicily. If any of our readers run across either or both of these gentlemen wandering about the Continent, please remind them that they are due to sail

back for the U. S. on the S. S. Andrea Doria early in October.

No fancy dry cleaning prices for one Mrs. Ruby Nealon of Los Angeles. Her old man's work pants were spotted with grease. Filling her washing machine with hot water, she added in addition to one of the well-known heavy duty detergents a large dash of gasoline. She turned on the machine and stepped out the back door to have a word or two across the fence with her neighbor. A loud blast interrupted the tete-a-tete. When she returned to her wrecked kitchen, the washing machine and the work pants had left the premises. Whether the mixture had removed the grease spots thus far has remained undetermined.

From Denver comes an AP report that when they washed \$100,000 worth of astronomical glass recently at the U. of Denver's Chamberlin Observatory, they used a straight synthetic detergent. This was the first time the telescopes and other glassware had been washed in 17 years. In commenting on the latest washing job, the unkindest cut of all came from Dr. Albert W. Recht, who stated that among other things it had removed a film of soap left from the previous cleaning in 1936. Do you think he meant it?

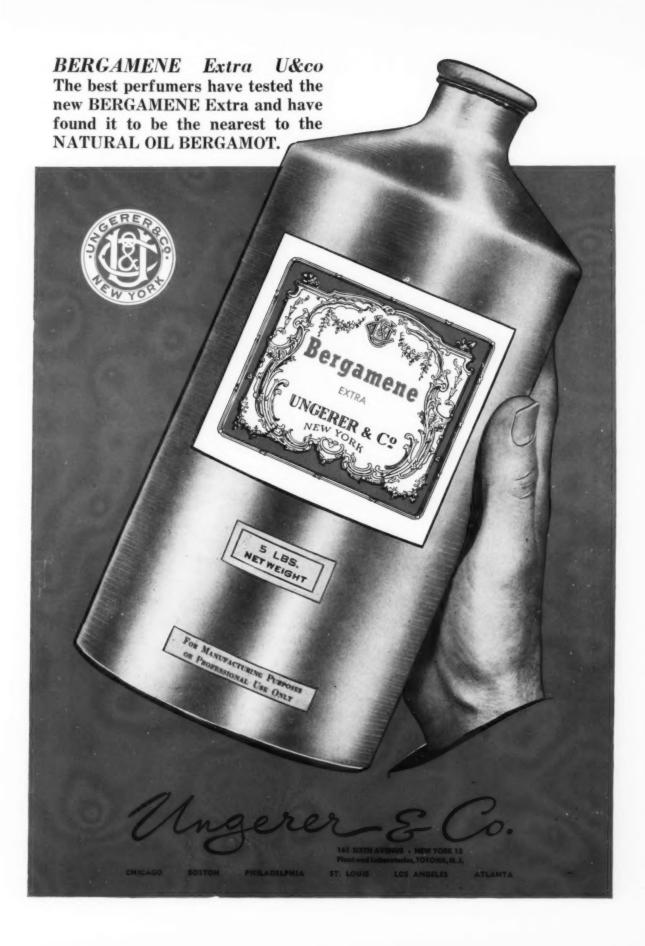
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